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ABSTRACT

This curriculum guide provides a basic core of instruction for the first year of a three-year adult program in farm business management. It contains 12 units of instruction. Each unit consists of seven basic components: performance objectives, teacher activities, information sheets (content essential for meeting the cognitive objectives), assignment sheets (application of knowledges that are prerequisites to skill development), supplements and transparency masters, tests, and test and assignment sheet answers. Depending on the specific objectives, supplements, transparency masters, assignment sheets, and job sheets may or may not be included. The 12 units cover orientation, recordkeeping, inventory and net worth statement, depreciation, enterprise accounting and supplemental records, enterprise budgets, cash-flow planning, farm credit, partial budgeting, marketing, income tax management, and year-end closing of records. (YLB)

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VOCATIONAL AGRICULTURE EDUCATION

FARM BUSINESS MANAGEMENT I

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STATE DEPARTMENT OF
VOCATIONAL AND TECHNICAL EDUCATION
STILLWATER, OKLAHOMA

OKLAHOMA STATE BOARD OF VOCATIONAL AND TECHNICAL EDUCATION

Farm Business Management

Volume I

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FARM BUSINESS MANAGEMENT

VOLUME I

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FOREWORD

This publication is designed to provide a basic core of instruction in teaching farm management in Oklahoma.

The teachers may use these materials to assist them in providing instruction for producers currently engaged in production agriculture. Agriculturists in today's fast-paced world of economics must not only be knowledgeable and well informed in matters relating to production agriculture, they must also be well versed in management and economics principles and techniques in order to make decisions required in their rapidly changing occupations.

Appreciation is expressed to the many individuals who helped in the development of this publication.

Francis T. Tuttle, State Director
Oklahoma State Department of
Vocational and Technical Education

Ralph Dreessen, State Supervisor
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PREFACE

Farm Business Management: Volume I is intended for use as an adult program of instruction for a three-year period, with *Farm Business Management: Volume II* and *Farm Business Management: Volume III* following it. Volume I will be of considerable benefit to instructors of vocational agriculture who wish to supplement the agriculture core curriculum previously developed by the Oklahoma State Department of Vocational and Technical Education with farm management instruction.

Every effort has been made to make this publication basic, readable and usable. Admittedly, the publication does not cover every area of farm management; but it does provide the student with the opportunity to progress without a great deal of reperition.

Some areas of farm business management have been left out of this publication because they will be covered in *Farm Business Management: Volume II* and *Farm Business Management: Volume III* units of instruction. Units of instruction in *Farm Business Management: Volume I* provide more detail on record keeping, cash-flow planning, budgeting, farm credit, introduction to marketing, and income tax management. Volume II units cover the analysis of farm records, marketing, capital budgeting, machinery economics, and income tax management. Volume III units focus on risk management, whole farm planning, farm business organizations, land resource acquisition, estate planning, and analysis of farm records. It is recommended that the *Oklahoma Young Farmer Record Book* be used in conjunction with the teaching of *Farm Business Management: Volume I.*

Individual on-farm instruction is the key to the successful completion of the three-year farm business management course of study. Each farm or ranch business represents a unique set of resources that the successful farmer or rancher must combine to produce a farm income sufficient to meet the needs and desires of the farm family. General principles of farm management and tools and techniques used to analyze the farm or ranch business can be taught in the classroom. The application of those principles and techniques must take place on the farm.

A successful farm business management education program is an excellent foundation for continuing agricultural education in the community. *Farm Business Management: Volume I* is an excellent resource for improving programs and assisting the farm or ranch family in achieving their family and farm business goals and objectives.

Jim Steward
Farm Business Management
Curriculum Specialist
Curriculum and Instructional
Materials Center
State Department of Vocational
and Technical Education

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Dr. Raleigh Jobes, Associate Professor and Extension Agricultural Economist, Oklahoma State University, Stillwater

Ray Wulf, Farm Business Management instructor at O. T. Autry AVTS, Enid

Mike Grider, Farm Business Management instructor at Red River AVTS, Duncan

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Much appreciation is also expressed to the Graphics Division for artwork and typing services performed during the development and publication of this volume.

Appreciation is also expressed to all the "CIMC team" for their continued support and encouragement, with a special note of thanks to Janet Sloan and Judy DeVaughan, CIMC secretaries, who assisted in the typing of these instructional materials and in preparing the tests.

Thank-you also goes to the Vocational Agricultural State Staff for their support of the Oklahoma Farm Business Management programs; and a special thanks goes to Bob Mitchell, North Central District Supervisor and State Young Farmer Coordinator, for his continuing support and assistance with the development of the farm business management programs in Oklahoma.

Special thanks also goes to Leland Myers and Jim Hodgens, former agriculture curriculum writers, for developing and writing the original *Farm Business Management Year I* curriculum.

Jim Steward

USE OF THIS PUBLICATION

Instructional Units

Farm Business Management: Volume I contains twelve units of instruction. The format used by the Oklahoma CIMC includes eight basic components that form a unit: performance objectives, suggested activities for the teacher, information sheets, assignment sheets, job sheets, supplements and transparency masters, tests, and answers to tests and assignment sheets. Depending on the specific objectives, there may or may not be supplements, transparency masters, assignment sheets, and job sheets included in the unit of instruction.

All of the unit components "zero in" on measurable and observable learning outcomes. Teachers are encouraged to supplement, personalize, localize, and motivate with these materials in order to develop a complete teaching/learning process.

Units of instruction are designed for use in more than one lesson or class period of instruction. Careful study of each unit of instruction by the teacher will help him or her determine the following

A. Amount of material that can be covered in each class period
B. Skills that must be demonstrated
  1. Supplies and equipment needed
  2. Amount of practice needed
  3. Amount of class time needed for demonstrations
C. Supplementary materials, such as pamphlets and filmstrips, that must be ordered
D. Resource people who must be contacted

Performance Objectives (white pages)

Each unit of instruction is based on the performance needed for successful employment in an occupational area. Performance objectives are stated in two forms: unit objectives, stating the subject matter to be covered in a unit of instruction; and specific objectives, stating the performance necessary to reach the unit objective.

The objectives should be provided for students and stressed throughout the teaching/learning process. This will help answer any questions concerning performance requirements for each instructional unit. The objectives can also help determine teaching strategies and instructional methods. Prepare for each unit by deciding how each objective can best be taught.

The objective sheet may also be used as a quick pretest to determine students' prior knowledge and to determine whether further study or activities are necessary. Teachers should feel free to modify, delete, or add objectives in order to meet the needs of the students and community. When changes in objectives are made, the teacher should remember to supply the needed information, assignment and/or job sheets, and criterion test items.

Suggested Activities (pink pages)

This component is included only in teacher material. The suggested activities page assists teachers during the preparation stage of the teaching/learning process by providing suggestions for delivery and/or presentation during the instructional process. Read the suggested activities before teaching the units to allow time to obtain supplemental materials, prepare audiovisual materials, and contact outside resources. Duties of the teacher will vary according to the particular unit.

The references that are listed are ones used in the development of each unit. They should be used by the teacher to supplement her or his knowledge of the subject area or to help students with particular interests or occupational objectives in the area covered.

Supplements and Transparency Masters (pink pages)

Transparency masters and supplements provide information in a special way. Transparencies direct the class's attention to the topic of discussion. Transparencies may present new information, or they may reinforce information presented in the information sheet. They are particularly effective when identification is necessary. Make or obtain transparencies and place them in the notebook where they will be immediately available for use. Supplements provide additional material and are designed to be copied and distributed to the cooperators as handouts.

Information Sheet (green pages)

The information sheet provides "must know" content essential for meeting the cognitive (knowledge level) objectives of the unit. The information is written in a topical outline form and is keyed to the specific objectives.

Teachers will find that the information sheet serves as an excellent guide for presenting background knowledge necessary to develop the skills specified in the unit objective. The information sheet may also be used for coordination activities and advisory committees.

Cooperators should read the information sheet before the information is discussed in class. Space is provided in margins for cooperators and teachers to add notes that supplement, localize, personalize, or provide motivation for each unit.

Assignment Sheets (brown pages)

Assignment sheets give cooperators a chance at problem solving, self-assessment, and/or practical experience with the information. They assist cooperators in the application of knowledges that are necessary prerequisites to skill development. These may be given to the cooperator for completion in class or used for homework assignments. Answer sheets are provided when appropriate and can be used by the cooperator and/or teacher for checking student progress.

Job Sheets (blue pages)

There are no job sheets in *Farm Business Management: Volume I.*

Tests (yellow pages)

This component provides criterion-referenced evaluation of every objective listed in the unit of instruction. It is crucial to note that both paper/pencil and performance objectives must be evaluated.

The tests may be written or oral. It is recommended that the tests be divided into shorter tests covering three or four objectives at a time and given soon after those objectives have been covered. A selection of questions from the units covered may be used for final tests at the end of each term if desired. If objectives have been added, deleted, or modified, be sure to make the changes on the test.

The acceptable response on a unit test, 85 percent in most units, may be raised or lowered to fit the topic or students' ability levels. The percentage applies to the overall score, not to each individual question. The final unit grade should be obtained by using the paper/pencil score along with evaluations of student demonstrations of the desired skills.

Answers to Test and Assignment Sheets (pink pages)

These components are designed to assist the teacher in evaluation of cooperator performances.

Page Numbering

Each publication from the Curriculum and Instructional Materials Center is assigned a specific abbreviation. For example, *Farm Business Management: Volume I* has been abbreviated FBM I. The units are then numbered consecutively within the manual. An example of a page number is FBM I-1. Since CIMC publications are loose leaf, this system of page numbering was adopted so that pages from different manuals would not get mixed up.

Methods of Disseminating Material

Material may be given out a unit or page at a time to keep the material before the cooperator always new. Some teachers ask cooperators to furnish a three-ring binder for the units. This is convenient for taking the materials home to study. Upon completion, each unit is then placed in a larger binder. The large binders may be purchased at cost from the CIMC. Some teachers store the materials by units in filing cabinets or boxes until needed. All the units may be given out at once if desired.

For best results, provide student materials for each cooperator. Student materials contain everything but the test answers, answers to assignment sheets, and suggested activities. All tests are collated at the back of student material and should be removed and stored until needed.

Teaching Methods

It is a challenge to keep cooperators motivated. Supplement the objectives by providing the "why," personal experiences, and current information. Prepare for each unit by deciding how each objective can best be taught. Allow cooperators to become involved in preparing and planning.

CORRECTIONS AND SUGGESTIONS

The Curriculum and Instructional Materials Center wants to provide vocational instructors and students with materials that are accurate and effective. Although the Center strives to maintain the highest standards of development and production, oversights occasionally do occur. If you find any errors in this or other CIMC publications, or have suggestions for improving their usefulness in vocational programs, please notify the CIMC staff. One easy way of pointing out errors is to make a photocopy of the affected page and to indicate the correction on the copy. You can mail the information to the CIMC, where it will be used to correct the publication before the materials are reprinted.

To ensure that the material is updated on a timely basis, it is important that you notify the Center of necessary corrections as soon as possible after discovering the error. Do not assume that someone else will notice the error and inform the CIMC; other users may be making the same assumption. Please send corrections and recommendations for improving this publications to the following address:

Assistant Coordinator for Development
Curriculum and Instructional Materials Center
Oklahoma State Department of Vocational and
Technical Education
1500 West Seventh Avenue
Stillwater, Oklahoma 74074

ORIENTATION
UNIT I

UNIT OBJECTIVE

After completing this unit, the cooperator should be able to discuss the purposes and benefits of a farm business management adult education program. The cooperator should also be able to distinguish between farm business and family goals and objectives. The cooperator will show this knowledge by completing assignment sheets and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the cooperator should be able to

1. Match to their correct definitions terms associated with farm business management and goal setting.
2. Select from a list components of a strong farm business management adult education program.
3. State the primary objective of a farm business management adult education program.
4. State basic questions a farm business management program should answer.
5. State benefits of a farm business management program.
6. Match areas of farm business management instruction to their correct descriptions.
7. State the role of a farm business management program instructor.
8. Select from a list elements of farm business management program organization.
9. List factors to consider in decision making.
10. Discuss strategy for decision making.
11. Arrange in order steps in a systematic decision-making process.
12. State advantages of systematic decision making.
13. Match types of activities a farmer faces to their correct descriptions.
14. Arrange in order the five-step process of time management.
15. State suggestions for organizing a schedule.

OBJECTIVE SHEET

16. List advantages and disadvantages of setting goals and objectives.
17. List possible farm business and family goals.
18. Discuss reasons for setting goals and objectives.
19. State guidelines for setting goals and objectives.
20. Distinguish among short-term, intermediate-term, and long-term goals and objectives.
21. List factors for determining priority of goals and objectives.
22. List examples of goals that compete for time, money, and earnings.
23. Select from a list techniques for achieving goals and objectives.
24. Complete a vo-tech farm business management education program questionnaire.
25. Complete a vo-tech farm business management education program agreement.
26. Complete enrollment forms.
27. Determine current level of effectiveness in time management.
28. Complete a "things to do" list.
29. Determine the basic values of the farm family for setting goals and objectives.
30. Establish farm business and family goals.
31. Develop objectives for farm business and family goals.

ORIENTATION
UNIT I

SUGGESTED ACTIVITIES

I. Unit contents

- A. Objective sheet
- B. Suggested activities
- C. Supplements
    1. Supplement #1 — Instructions for Game "Who Am I Like?"
    2. Supplement #2 — Success Is Reaching One's Goals
    3. Supplement #3 — Mutual Objectives
- D. Information sheet
- E. Transparency masters
    1. TM #1 — Where Am I?
    2. TM #2 — Where Do I Want to Be?
    3. TM #3 — How Can I Get There from Here?
    4. TM #4 — Farm Business Goals
    5. TM #5 — Family Goals
- F. Assignment sheets
    1. Assignment Sheet #1 — Complete a Vo-Tech Farm Business Management Education Program Questionnaire
    2. Assignment Sheet #2 — Complete a Vo-Tech Farm Business Management Education Program Agreement
    3. Assignment Sheet #3 — Complete Enrollment Forms
    4. Assignment Sheet #4 — Determine Current Level of Effectiveness in Time Management
    5. Assignment Sheet #5 — Complete a "Things to Do" List
    6. Assignment Sheet #6 — Determine the Basic Values of the Farm Family for Setting Goals and Objectives
    7. Assignment Sheet #7 — Establish Farm Business and Family Goals

SUGGESTED ACTIVITIES

8. Assignment Sheet #8 — Develop Objectives for Farm Business and Family Goals

F. Answers to assignment sheets

G. Test

H. Answers to test

II. Instructor's guide

A. Order *Oklahoma Farm Business Management Program* to supplement unit.

(NOTE: This thirteen-minute slide-tape presentation is available from Farm Business Management Curriculum Specialist, Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1500 West Seventh Avenue, Stillwater, Oklahoma 74074. It can be used as a substitute for the instructor's discussing Objectives 1 through 8.)

B. Make transparencies; make transparencies or copies of supplements as appropriate.

C. Provide refreshments and plan get-acquainted activity for break time.

EXAMPLES: Pair cooperators and ask them to introduce each other when class begins.

Provide cooperators with Supplement #1 so that they may play "Who Am I Like?" You may wish to give a prize to the cooperator who collects the most signatures.

D. Provide cooperators with copies of the unit.

E. Open class by introducing yourself and asking all persons to briefly introduce themselves.

(NOTE: Suggest that each person share his or her name, number of children, location of farm, enterprise on farm, hobbies, or interests.)

F. Discuss unit and specific objectives.

1. Emphasize the purposes of the farm business management program.

EXAMPLES: Show newspaper clippings about cooperators who are enrolled currently or who have participated in the program.

Ask cooperators or former cooperators to speak to this new class on the benefits that they have received from their participation in the farm business management program.

Present selected items of information from the state and area comparative analysis so that this information can be compared with information from cooperators' farms.

SUGGESTED ACTIVITIES

2. Discuss the setting of goals and objectives, and explain the importance of goals and objectives for those enrolling in the farm business management program

   EXAMPLE: Use roadmaps to illustrate the idea that setting goals and objectives is much like using roadmaps to plan a trip. Ask potential cooperators to imagine taking a trip from their home to Seattle. Ask them to describe their probable routes. Focus on the idea of alternate travel routes and the reasons that people make different travel plans even though their goal may be the same (Seattle).

G. Discuss information and assignment sheets.

1. Review the *Program Guide for Oklahoma Farm Business Management Programs* before discussing Objectives 1 through 8.

   (NOTE: It is recommended that the instruction of the material in Objectives 1 through 8 be completed before break. If the slide-tape presentation is used, time required for covering the material can be decreased.)

2. Discuss Objective 1, pointing out the importance of defining terms so that each term holds the same meaning for all participants in the program.

3. Discuss Objectives 2 and 3 to point out the basic premise involved in a successful farm business management program.

4. Discuss Objective 4, using Transparencies #1 through #3. Discuss the objectives of the farm business management program, and provide examples of areas covered in each year of the three-year course of study.

5. Discuss Objective 5, emphasizing the benefits of the program by referring to selected information in the state and area comparative analysis report relevant to local firms.

6. Introduce potential cooperators to the areas of instruction provided in the farm business management program by discussing Objective 6. Have cooperators complete Assignment Sheet #1.

   (NOTE: The questions in Assignment Sheet #1 focus on the cooperators' farming operations and their knowledge of farm management. This information will help you properly plan for the class and for individual on-farm instruction. Encourage cooperators to carefully consider their answers to the last item in Assignment Sheet #1.)

SUGGESTED ACTIVITIES

7. Discuss Objective 7 to delineate the roles of the instructor and of the cooperators. Have cooperators complete Assignment Sheet #2. Make copies for yourself and each cooperator; encourage cooperators to make files for their copies; file a copy at school.

   a. Ask class members what they expect of the instructor.

   b. Point out what you expect of them as a class and as individuals.

   c. Discuss each part of Assignment Sheet #2 with potential cooperators before asking them to sign the agreement.

8. Explain the importance of individual on-farm instruction by discussing Objective 8. Before cooperators complete Assignment Sheet #3, ask them to consider times that they cannot meet with the instructor.

   (NOTE: Allow cooperators to take a break after completing discussion of Objective 8 and Assignment Sheet #2. Encourage them to socialize during break time.)

9. Use Supplement #2 to point out that success is reaching one's goals. Explain that there are different goals for different people, and that each of us has goals. Some of our goals relate to farm business while some relate more to family. Some goals are more important than others. There are $5 goals and $5,000 goals. Encourage cooperators to keep in mind the overall importance of their goals and to treat each goal accordingly. Discuss Objective 9.

10. Discuss Objectives 10 through 12 to explain the importance of a systematic approach to decision making.

11. Discuss Objective 13 to emphasize that without goals many activities seem important, but that when one has a set of goals these same activities may contribute nothing toward the goals and may sometimes interfere with getting anything productive done.

12. Discuss Objective 14 to introduce the importance of time management in the total farm program.

    a. Have class members complete Assignment Sheet #4. Be sure to have each class member determine his or her personal profile for time management effectiveness.

    (NOTE: You may need to provide extra copies of Assignment Sheet #4 for each spouse.)

    EXAMPLE: Ask class members the following questions: "If you had $86,400 each day to spend any way you wanted, how would you spend it? "Many will

SUGGESTED ACTIVITIES

answer that they would spend the money for materialistic things such as new homes, cars, and travel, but as class discussion continues, long-range goals, such as buying farmland or other investments, will be brought up. Point out that each of us has 86,400 seconds each day. Ask class members how they are spending their time.

b. Discuss the importance of developing a written list of activities. Have each class member complete Assignment Sheet #5.

(NOTE: You may wish to provide the class with additional copies of Assignment Sheet #5.)

13. Discuss Objective 15, emphasizing that before goals can be reached, time must be controlled on a daily basis.

14. Discuss Objective 16 to point out that without a set of well-planned goals, a farm family may not know where they are headed. Use Supplement #3 to illustrate that there are different goals for different people, and to stress the importance of working together to accomplish objectives.

15. Use Transparencies #4 and #5 to provide examples of goals for one family. Discuss the words *farm business* and *family*. When discussing Objective 17, ask class members to add possible goals and objectives to the list.

16. Discuss Objective 18 to emphasize that goals for the farm business and the family may not agree. Have class members complete Assignment Sheet #6.

EXAMPLE: Divide the couples. Place the men on one side of the room, and the women on the other side. Have them rate their basic values individually first. Then have families regroup to complete a team consensus.

(NOTE: You will need to provide the class with additional copies of Assignment Sheet #6.)

17. Discuss Objective 19. Have class members begin Assignment Sheet #7. Allow families to discuss and start to develop goals. Remember, identifying goals may be new to many cooperators, so allow the class members ample time to react to the presented concept of goals. The purpose of this assignment sheet is to get the group thinking about goals and objectives. Do not expect them to finish in class. Ask them to continue working on this assignment sheet prior to the on-farm instruction. After cooperators have had time to discuss their major goals, ask each family to share one goal. Write these shared goals on the chalkboard or on a transparency to provide examples of how goal setting is done, and to get the group to think about different goals.

SUGGESTED ACTIVITIES

18. Discuss Objective 20, emphasizing the importance of creating goals and objectives with specific quantities and dates so that progress can be measured. Have the class complete Assignment Sheet #8 to clarify the difference between the goals and objectives.

19. Discuss Objectives 21 through 23. Emphasize that land, labor, capital, and good management allow individuals and families to achieve their goals.

H. Provide cooperators with additional copies of Assignment Sheets #7 and #8 to be completed at home prior to your next scheduled on-farm instruction.

I. Give test.

J. Reteach if necessary.

III. Unit references

A. Albracht, James. *Kansas Postsecondary Farm and Ranch Management Project, Farm Management Basic Core Curriculum.* Pittsburg, Kansas: Pittsburg State University/Vocational Curriculum Materials Center, n.d.

B. Denker, Robert, et al. *Farm Business Management Analysis: Establishing a Farm Accounting System.* Columbia, Missouri: Instructional Materials Laboratory, University of Missouri-Columbia, Volume 13, (March, 1981).

C. Frost, Elizabeth. "The Successful Teacher's Guide to Time Management." *Forecast for Home Economics*, September, 1981, p. 33 and 34.

D. Hodgens, Jim, and Leland Myers. *Farm Business Management Year 1.* Stillwater, Oklahoma: State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1979.

E. Osborn, Donald D., and Kenneth C. Schneeberger. *Modern Agriculture Management.* Reston, Virginia: Reston Publishing Company, Inc., 1978.

F. Steward, Jim. *Farm Business Management Volume III.* Stillwater, Oklahoma: State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1983.

G. Steward, Jim. *Program Guide for Oklahoma Farm Business Management Programs.* Stillwater, Oklahoma: State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1982.

H. "Time Management Part I." *Small Business Report*, Vol. 7 (July, 1982), p. 23-27.

I. "Time Management Part II." *Small Business Report*, Vol. 7 (August, 1982).

SUGGESTED ACTIVITIES

SUPPLEMENT #1

INSTRUCTIONS FOR GAME "WHO AM I LIKE?"

The following mixer activity helps strangers begin to feel comfortable with each other.

WHO AM I LIKE?

The statements listed below can help you become acquainted with others who are attending this class. Circulate among the group members to find individuals who are described in each of the statements that follow. When you locate persons who "qualify," ask them to sign your sheet on the appropriate line(s).

______________________ 1. Someone with the same birth month as yours

______________________ 2. Someone who raises cattle

______________________ 3. Someone with the same first initial as yours

______________________ 4. Someone who has the same hobby as yours

______________________ 5. Someone with whom you would like to find yourself stranded on a deserted island

______________________ 6. Someone who was born outside the state of Oklahoma

______________________ 7. Someone who has the same number of children as you

______________________ 8. Someone who "Skoal-dips" or "skinny-dips"

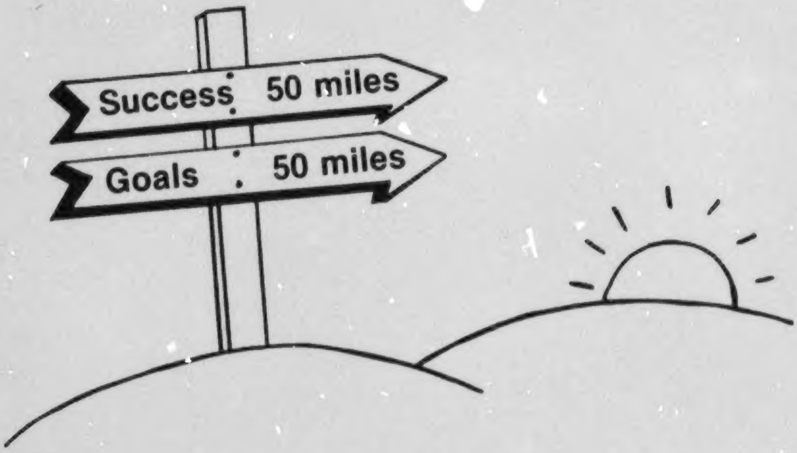
______________________ 9. Someone who owns a green tractor

______________________ 10. Someone who has traveled outside the United States

SUGGESTED ACTIVITIES

SUPPLEMENT #2

Success Is—


Success : 50 miles
Goals : 50 miles

Reaching One's Goals!

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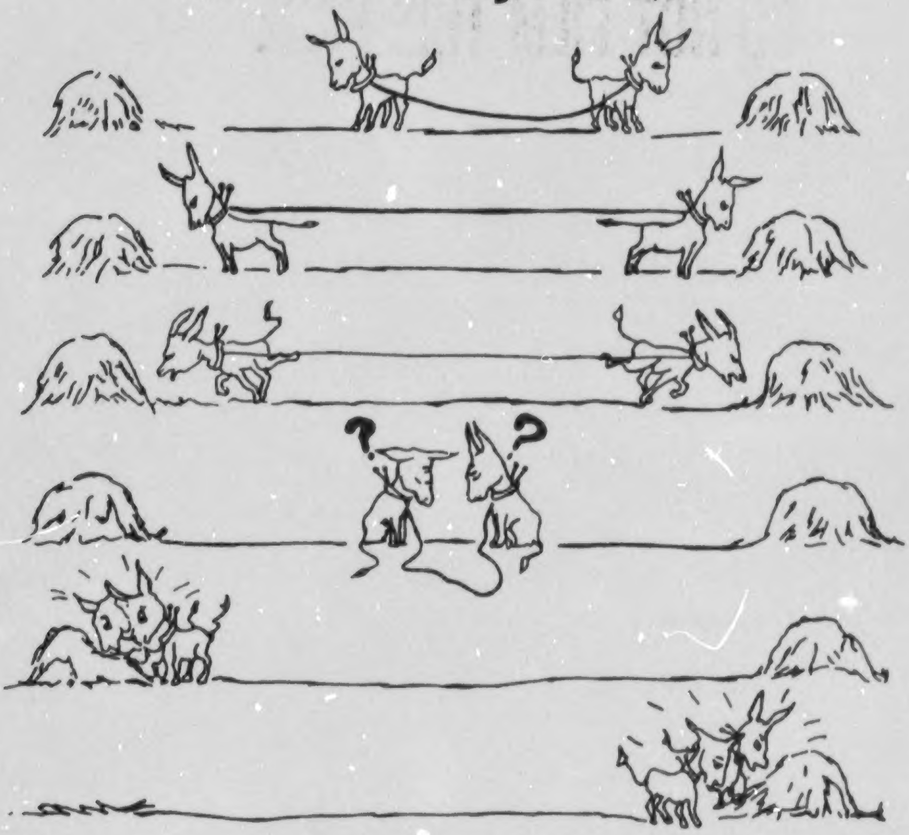
SUGGESTED ACTIVITIES

SUPPLEMENT #3

Mutual Objectives



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ORIENTATION
UNIT I

INFORMATION SHEET

I. Terms associated with farm business management and goal setting

   A. Farm business management — Combination of economic analysis and business control, and the management of biological processes within the context of changing technical, legal, and human environments

      (NOTE: Farm business management is more than either the direct application of production economic principles or technical production management as would be taught in a production agriculture curriculum.)

   B. Farmer — Person who earns a living by farming or ranching; one who operates or manages a farm or ranch

      (NOTE: In this program, the terms *farmer, farm,* and *farming* are generalized to include both farming and ranching operations.)

   C. Cooperator — Participant in the farm business management program

   D. Curriculum — Instructional materials from which information is presented in the classroom or used in on-farm instruction

      EXAMPLES: Units of instruction, books, guides, course outlines, films, transparencies, printed material, fact sheets

   E. Course of study — Planned sequence of learning activities

   F. Individual on-farm instruction — Scheduled, planned individual learning activity that occurs at the cooperator's farm or ranch

   G. Class meeting — Scheduled, planned group learning activity that occurs at a specified meeting place

   H. Time management — Effective control of time

   I. Goals — Broad statements that can be classified

   J. Objectives — Specific statements that are measurable and realistically attainable

II. Components of a strong farm business management adult education program

   A. Goal orientation

      (NOTE: Farm families have different farm business goals and objectives.)

INFORMATION SHEET

B. Established data base

(NOTE: Good farm managers play the facts, not the hunches. The record system must be complete enough to provide not only financial planning details but also the data necessary to point out the possible weaknesses and strengths of each enterprise in the farm business.)

C. Farm record analysis

(NOTE: To be useful, the farm business management program must provide some form of analysis and summary of the farm record data. The program should also provide a summary analysis of cooperating farmers' records to serve as a benchmark for judging the efficiency and organization of the individual's farm business.)

D. Planned course of study

(NOTE: One of the objectives of the program should be to educate farm families to view each decision in light of the effects it will have on the overall farm business.)

E. Personalized instruction

EXAMPLES: Farm record analysis, individual on-farm instruction

F. Technical support

(NOTE: To grow and prosper, farm business management programs need as much philosophical, financial, and administrative commitment from farm families and schools as do programs at other levels.)

III. Primary objective of farm business management adult education program — To improve the effectiveness of the farming operation in order to assist farm families achieve their farm business and family goals and objectives

IV. Basic questions a farm business management program should answer

A. Where am I?

EXAMPLES: Develop a record-keeping system, inventories, financial statement; improve decision-making abilities; complete whole farm and detailed enterprise analyses, present farm plan.

B. Where do I want to be?

EXAMPLES: Establish farm business and family goals and objectives, marketing strategies, machinery management, alternative farm plans.

INFORMATION SHEET

C. How can I best get there from here?

EXAMPLES: Complete whole farm planning, estate planning, and inventory; compare strengths and weaknesses of farm business organizations.

V. Benefits of a farm business management program

A. Improves cooperator's ability to survive as a farmer or rancher

B. Allows cooperator to identify farm business and family goals and objectives

C. Increases cooperator's knowledge about farm business performance

(NOTE: Cooperators gain control by completing activities associated with financial statements, whole farm and detailed enterprise analyses, whole farm planning, marketing strategies, estate planning strategies, income tax management strategies.)

D. Allows cooperator to develop a strong and stable agriculture, which gives strength to the community

(NOTE: When a farmer purchases inputs from an agribusiness, that business is being supported by agriculture. In turn, businesses provide consumption items, without which the lives of rural people would be greatly restricted.)

VI. Descriptions of areas of farm business management instruction (Assignment Sheet #1)

A. Record keeping — Develops skills in keeping accurate, up-to-date records for use in analyzing the farm business

EXAMPLES: Decision making; farm credit needs and repayment abilities; cash flow statements; financial statements; history of farm business performance; legal purposes such as income tax, FICA taxes, and government programs; whole farm and detailed enterprise analyses; summary analysis

B. Credit planning and analysis — Uses financial statements to determine need for credit, cost of credit from alternate sources, and payback capabilities

C. Income tax management — Helps to maximize after-tax income and stabilize income from year to year

INFORMATION SHEET

D. Financial management — Identifies strengths and weaknesses of the farm business, assesses financial progress, and makes necessary corrections to improve future profitability of the farm business

E. Marketing — Assesses advantages and disadvantages of forward contracting, hedging, and other marketing strategies; then selects best alternative in keeping with the farm's position, attitude toward risk, and farm business and family goals and objectives

F. Machinery economics — Evaluates machinery size, efficiency, and costs within farm constraints

(NOTE: Farm constraints may include labor, management, time limits, mechanical ability, and capital.)

G. Risk management — Reduces variability of income through flexibility, diversification, skillful marketing, financial reserves, insurance, irrigation, and other strategies

H. Long-range planning — Develops and evaluates different alternate farm plans, using available resources and planning tools to attain farm business and family goals and objectives

EXAMPLES: Whole farm planning, enterprise budgets, financial statements, partial budgeting

I. Farm business organizations — Survey alternate forms of business organization and their advantages and disadvantages

EXAMPLES: Sole proprietorship, partnerships, corporations

J. Estate planning — Helps to minimize transfer costs consistent with objectives of the owner

EXAMPLES: Equitable distribution, keeping estate intact

VII. Role of a farm business management program instructor (Assignment Sheet #2)

A. To train farm families to recognize their farm problems

B. To evaluate related facts obtained from farm records and other reliable sources

C. To evaluate alternatives and to make decisions based on their evaluation

INFORMATION SHEET

VIII. Elements of farm business management program organization (Assignment Sheet #3)

  A. Specific units of instruction offered in a definite sequence over a specified period of time

  B. Continuity between units of instruction leading toward accomplishment of farm business and family goals and objectives

  C. Limited class size

  D. Instruction in the classroom and on the farm

  E. Enrollment fees to help pay for instructional materials

IX. Factors to consider in decision making

  A. Complexity of decision

    1. Major

      EXAMPLE: Selecting a livestock system

    2. Minor

      EXAMPLE: Brand of chemical to buy

  B. Frequency of decision

    1. Once in a lifetime

      EXAMPLE: Buying a farm

    2. Daily

      EXAMPLES: Clothes to wear, food to eat

  C. Variables

    1. Collection of continuing data

      EXAMPLES: Grain marketing, livestock marketing

    2. Dependence on other forces

      EXAMPLES: Weather, government policies

X. Strategy for decision making

  A. Reduce number of daily decisions

INFORMATION SHEET

B. Collect data and compare alternatives

C. Order priorities from least to most important

XI. Steps in a systematic decision-making process

A. Define problem

EXAMPLE: Own combine versus custom harvest

B. Gather information about solutions

EXAMPLES: Custom harvest charges, depreciation, interest, labor, repairs, fuel, timeliness, taxes

C. Evaluate solutions

EXAMPLES: Additional costs, reduced returns, additional returns, reduced costs

D. Make decision consistent with goals and objectives

EXAMPLE: Buy a combine to maximize after-tax income

E. Put decision into effect

(NOTE: Most decisions are made under conditions of uncertainty or imperfect knowledge. For any particular decision, there may be a number of possible outcomes depending on factors which are beyond the control of the farmer. These possibilities may be accounted for if the farmer takes into consideration the probability of a future event occuring.)

F. Evaluate and accept consequences

XII. Advantages of systematic decision making

A. Achievement of outcomes closely related to goals

B. Timeliness in decision making

C. Better-organized thought processes

XIII. Types of activities a farmer faces

A. Urgent — Activities that spring from yesterday's problems, not from today's opportunities

(NOTE: While *urgent* connotes immediacy, it does not necessarily relate to importance.)

INFORMATION SHEET

B. Important — Activities that bring results and that are most essential to long-range goals

(NOTE: Only those activities that produce a "yes" answer to the following question are ranked important: "Will this activity result in high yield or contribute to achieving a vital goal or objective?")

C. Required — Activities that must be performed but are not critical enough to rate as important

(NOTE: Be aware that it is at the expense of important activities that these required activities are often done.)

D. Routine — Activities that when completed contribute nothing important

(NOTE: Routine activities include all busy work that takes up time. Such busy work often makes farmers feel that they are producing.)

E. Other — Activities that interfere with getting anything done

EXAMPLES: Visiting over coffee, nonproductive time

XIV. Five-step process of time management (Assignment Sheets #4 and #5)

A. Determine how time is currently being spent

EXAMPLES: Daily, weekly, or monthly time log

(NOTE: Keeping time logs every working day may seem a time waster in itself, but consider the amount of time spent tracking how money is spent. Keeping track of time is just as vital.)

B. Determine where time should be spent

EXAMPLE: Setting priorities for major goals, objectives, and activities

(NOTE: The greatest obstacle to a farm manager's success is to allow urgency to dictate how time will be spent.)

C. Measure the use of time

EXAMPLES: Rate activities performed each day in terms of payoff; price time.

(NOTE: A close analysis of where time is being spent and where it should be spent can best be done by comparing time logs and priority lists. To measure how effectively time is presently being used, establish a relationship between time and value. After establishing such a relationship, it is easier to determine whether the activities presently being performed are worth the time and effort needed to perform them.)

INFORMATION SHEET

D. Order priorities

EXAMPLES: Time must be scheduled to meet top priorities. Planning takes time. As a general rule, spending only 5 percent of the day planning can help farm managers achieve 95 percent of their goals and objectives. The more time spent on this vital activity, the more productive the rest of the day will be.)

E. Control time wasters

EXAMPLES: Telephone, unscheduled meetings, unexpected visitors, unneeded paperwork, reading nonessential materials

(NOTE: The three big time wasters—interruptions, waiting, and procrastination—can make life very complex.)

XV. Suggestions for organizing a schedule

A. Get an early start

(NOTE: Plan the day and get organized by making a list of goals and objectives.)

B. Streamline paperwork

(NOTE: Handle all correspondence, telephone calls, and inquiries promptly and efficiently. Putting off tedious paperwork only makes the job bigger and worse when it is finally faced.)

C. Start tomorrow's tasks today

(NOTE: Even a few minutes' work on a project planned for the following day allows you to start in the next morning without running the gamut of "can't start" excuses.)

D. Keep a notebook handy

(NOTE: Jot down reminders of things to be done, ideas that might otherwise slip away, sudden insights, instructions, and notes for you only.)

E. Keep your time schedule flexible for priority activities

(NOTE: When you can do it, schedule your most difficult work for times when you work most efficiently.)

INFORMATION SHEET

F. Take charge of your emotions

EXAMPLES: Fears, irritation, frustration, worry, and anxiety

(NOTE: Control the way you feel. Try acting upon possibilities instead of worrying about the future. Action helps you complete the job, and offers mental relief.)

G. Get regular exercise

(NOTE: Exercise helps keep you relaxed, alert, and aware of priorities.)

XVI. Advantages and disadvantages of setting goals and objectives

A. Advantages

1. Shows where you are going

   EXAMPLE: Roadmap

2. Distinguishes between major and minor goals and objectives

   (NOTE: Such distinction makes it easier to get where you are going.)

3. Gives purpose and direction to decisions and actions

   (NOTE: Purpose and direction free you from worries and uncertainties about where you are headed.)

4. Prepares you to meet the future

   (NOTE: You see the overall farm business, and focus on critical relationships.)

B. Disadvantages

1. Takes time to decide on goals and objectives
2. Is difficult to come to grips with the many, and often conflicting, goals and objectives
3. May lead to indecision or lack of confidence when trying to determine priorities
4. Becomes more difficult as problems become more numerous

INFORMATION SHEET

5. Appears to be a waste of time when farmers fail to see need for goals or objectives

   (NOTE: Some farmers see their major objective as surviving for another year. They fail to recognize that survival is but one of many goals. However, other goals may be contingent on survival.)

XVII. Examples of farm business and family goals

A. Owning a farm

B. Building a house

C. Providing education for children

D. Controlling a larger farm business

E. Being a good neighbor

F. Having more leisure time

G. Being a community leader

H. Improving the family's standard of living

I. Having a neat, well-kept farmstead or ranch

XVIII. Reasons for setting goals and objectives (Assignment Sheet #6)

A. To determine what is worthwhile

B. To explain why one thing and not another is done

EXAMPLE: Attitudes toward risk

C. To create permanent goals and objectives

XIX. Guidelines for setting goals and objectives (Assignment Sheet #7)

A. Should be yours

(NOTE: All family members should contribute.)

B. Should be written

(NOTE: Written goals and objectives serve as reminders and records.)

INFORMATION SHEET

C. Should be realistic and attainable

(NOTE: Goals and objectives should be something that can be accomplished with some effort. Select goals and objectives in terms of available resources.)

D. Should have target dates

(NOTE: Give yourself time limits. Recognize both short-term and long-term goals and objectives. Goals and objectives may need to be modified as resources change or as the family is able to use the resources more efficiently.)

E. Should be compatible

(NOTE: Watch out for conflicts. Competition between goals and objectives is normal and desirable but may be frustrating.)

F. Should not be activities

(NOTE: Remember, activities are actions taken to accomplish goals and objectives.)

XX. Short-term, intermediate-term, and long-term goals and objectives (Assignment Sheet #8)

A. Short-term

1. Require less than one year for achievement

2. Provide immediate satisfaction

EXAMPLES: Running a soil test to plan fertilizer rate; finishing a calf; painting a building

B. Intermediate-term

1. Usually require one to seven years for achievement

2. Provide basis for long-term goals and objectives

EXAMPLES: Raising funds and putting up a farm building; buying a farm

C. Long-term

1. Require more than seven years for achievement

2. Provide a sense of direction

EXAMPLES: Developing personality, leading a useful life, being a better citizen, being a community leader

INFORMATION SHEET

XXI. Factors for determining priority of goals and objectives

A. Dollar value

EXAMPLE: Cost versus returns

B. Time

EXAMPLE: Where can my time be spent?

C. Importance

(NOTE: Place most important goals and objectives first; avoid jumping from crisis to crisis.)

D. Resources

EXAMPLES: Land, labor, capital

XXII. Examples of goals that compete for time, money, and earnings

A. Improving capital base

EXAMPLE: Adding feeding capacity

B. Scheduling time to manage the business

EXAMPLE: Keeping and analyzing records on timely basis

C. Providing family comfort or convenience

EXAMPLE: Remodeling kitchen

D. Improving farmstead or ranch property

EXAMPLE: Painting fences

E. Providing time for recreation

EXAMPLE: Skiing at the lake on weekends

XXIII. Techniques for achieving goals and objectives

A. Check progress regularly

B. Use saved time and effort wisely and effectively

INFORMATION SHEET

C. Organize efforts on a "things to do" worklist

(NOTE: Check off completions regularly for satisfaction.)

D. Check for slow or nonmoving activities

(NOTE: You may need to consider available funds or consult with agricultural experts.)

E. Modify goals and objectives as resources change or as the family is able to use resources more efficiently

Where Am I?

Year I Objectives

The cooperator shall be able to:

A. Complete the necessary financial and physical records to compute the farm business analysis and income tax forms.

- Record book
- Farm receipts
- Farm expenditures
- Depreciation schedule
- Inventory
- Credit records
- Family living summary
- Cash flow summary
- Supplemental records
- Net worth statement
- Hired labor

B. Complete a cash flow projection to determine credit needs and repayment ability and to compare with the farm's cash flow summary.

C. Complete a ten-month income tax worksheet.

Where Do I Want to Be?

Year II Objectives

A. Complete the analysis of Year I records and evaluate the farm business progress for the year and its comparison with similar farms.

- Net worth statement
- Income statement
- Whole farm analysis
- Measures of performance
- Income tax forms
- Detailed enterprise analysis
- State and area summary analysis

B. Determine the marketing techniques useful for the cooperator's farm business that are coordinated with cash flow needs and farm plans and goals.

- Forward pricing
  - (Contracts
  - (Hedging
- Time value of money

C. Develop income tax management strategies for good and bad years.

- Income tax management
- Ten-month income tax worksheet

How Can I Get There from Here?

Year III Objectives

A. Determine the farm organizational structure best suited for cooperator's farm business and family goals.

  - Whole farm planning
  - Farm business organization
  - Estate planning
  - Land resource acquisition
  - Risk management

B. Complete financial and physical records and analyze the progress of the farm business.

Farm Business Goals

	Less Than One Year—Short Term	One to Seven Years—Intermediate Term	Over Seven Years—Long Term
Net Income	$ 15,000	$ 20,000	$ 25,000
Size of Farm			
Acres	120	200	360
Sales	80,000	100,000	120,000
Investment	250,000	300,000	400,000
Financial Security			
Savings	0	0	10,000
Percent Equity	40%	50%	70%
Other			

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Family Goals

	Short Term	Intermediate Term	Long Term
Home	Home improvement, carpeting and new furniture	Add family room	New home
Development of Family Members	Develop better farming expertise by attending farm business management classes	Send wife to nearby community college	Send children to college
Social and Recreational	Take minimum five-day family vacation	Take longer trip to California to see brother	Travel to a foreign country
Community and Church Involvement	Attend church regularly	Actively participate in money-making activities	Be church officer
Other			

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ORIENTATION
UNIT I

ASSIGNMENT SHEET #1 — COMPLETE A VO-TECH FARM BUSINESS MANAGEMENT EDUCATION PROGRAM QUESTIONNAIRE

NAME ____________________ SCORE __________

The purpose of this assignment sheet is to assist the cooperator and the farm business management instructor in assessing educational priorities for the cooperator before the cooperator enters the vo-tech farm business management education program.

Complete the vo-tech farm business management education program questionnaire that follows. Complete the statements and circle appropriate answers to indicate your individual situation.

NAME____________________ PHONE__________

ADDRESS ____________________

LOCATION OF FARM ____________________

____

LOCATION OF HOME ____________________

____

A. Is your farm business a (a) sole proprietorship, (b) partnership, (c) corporation?

B. Total acres farmed __________ Total acres rented __________ Total acres irrigated __________

C. What percent of your personal income is derived from the farm business? (a) less than 50% (b) 50 to 75% (c) 75 to 99% (d) all

D. List sources of outside income. ____________________

____

E. What are the estimated number of monthly farm and family transactions? (a) less than 40 (b) 41 to 60 (c) 61 to 80 (d) more than 80

F. What is your accounting period? (a) calendar year (b) fiscal year

G. If you marked *fiscal year*, list the beginning and closing dates of your accounting period. From __________ to __________

H. Does your farm provide a comfortable living for your family? (a) yes (b) no

ASSIGNMENT SHEET #1

I. If you marked *no*, what would provide a comfortable living? ______________________
____

J. Do you maintain a record book? (a) yes (b) no

K. If you marked *yes*, who posts the entries in your record book? ______________

How often are entries posted? ______________________________

L. If you marked *no*, how do you keep records? ______________________
____

M. What method of record keeping are you using now? (a) cash (b) accrual

N. What type of records system interests you? (a) hand record (b) computerized record

O. Do you take a written inventory at least once each year? (a) yes (b) no

P. If you marked *no*, how often do you take a written inventory? ______________

Q. Do you keep enterprise records? (a) yes (b) no

R. If you marked *no*, how do you determine profitability of an enterprise? __________
____

S. What farm enterprises do you maintain? (a) cow/calf (b) stockers (c) hay (d) wheat (e) milo (f) cotton (g) peanuts (h) other ______________

T. If you marked *other*, list the enterprise(s). ______________________
____

U. What physical (production) records do you keep? (a) breeding (b) mortality (c) feed (d) machinery (e) DHIA (f) other ______________________

V. If you marked *other*, list the record(s). ______________________
____

W. What budgeting tools have you used in making decisions? (a) enterprise budget (b) cash flow summary (c) cash flow projection (d) partial budget (e) whole farm planning (f) other ______________________

X. If you marked *other*, list the budgeting tool(s). ______________________
____

ASSIGNMENT SHEET #1

Y. Have you ever used a microcomputer? (a) yes (b) no

Z. If you marked *yes*, what brand of microcomputer have you used, ______________________

______________ and what software have you used? ______________________

____

AA. Have you borrowed money for your farming operation? (a) yes (b) no

BB. If you marked *yes*, what sources have you used? (a) bank (b) FHA (c) PCA (d) Federal Land Bank (e) savings and loan (f) school land commission (g) insurance company (h) individual (i) other ______________________

CC. If you marked *other*, list the source(s). ______________________

____

DD. What is your estimated debt load?

Current liabilities: (a) less than $50,000 (b) $50,001 to $100,000 (c) more than $100,001

Intermediate liabilities: (a) less than $50,000 (b) $50,001 to $100,000 (c) more than $100,001

Long-term liabilities: (a)less than $50,000 (b) $50,001 to $150,000 (c) more than $150,001

EE. Do you update your net worth statement at least once each year? (a) yes (b) no

FF. If you marked *no*, how often is your net worth statement brought up to date? ______

____

GG. Do you complete an income statement at least once each year? (a) yes (b) no

HH. If you marked *no*, how do you determine the net farm income for your farming operation? ______________________

____

II. Do you prepare your own income tax return? (a) yes (b) no

JJ. If you marked *no*, who does? (a) tax accountant (b) CPA (c) other ____________

KK. With which of the following income tax terms are you familiar? (a) investment credit (b) income averaging (c) depreciation (d) capital gains (e) ACRS (f) net operating loss (g) alternative minimum tax (h) fuel tax credit (i) self employment tax (j) FICA withholding (k) form 1099

ASSIGNMENT SHEET #1

LL. Have you ever forward priced a commodity? (a) yes (b) no

MM. If you marked *yes*, what forward pricing strategies have you used? ______________

____

NN. Do you have an estate plan? (a) yes (b) no

OO. Do you maintain a separate bank account for your farm business? (a) yes (b) no

PP. Is your depreciation schedule complete and up to date? (a) yes (b) no

QQ. Do you have a written set of farm business and family goals and objectives? (a) yes (b) no

RR. If you marked *no*, would you be willing to establish a set of goals and objectives? (a) yes (b) no

SS. Will all principal members of your farm business be willing to regularly attend a farm business management class *once* each month? (a) yes (b) no

TT. If you marked *no*, who will attend? ______________________________

UU. Will you be willing to schedule individual on-farm instruction with the instructor? (a) yes (b) no

(NOTE: Individual on-farm instruction is the *key* to successful completion of the program.)

VV. Do you understand that the area vo-tech school farm business management adult education program is a three-year management program? (a) yes (b) no

WW. Briefly state in your own words why you desire to enroll in the farm business management program.

____

____

____

____

____

ORIENTATION
UNIT I

ASSIGNMENT SHEET #2 — COMPLETE A VO-TECH FARM BUSINESS MANAGEMENT EDUCATION PROGRAM AGREEMENT

NAME ____ SCORE ________________

The purpose of this assignment sheet is to further define the responsibilities of the cooperator and the farm business management program instructor toward the accomplishment of the objectives of the farm business management program.

This agreement is entered into this ______________________________________ day of

_____ ________________, 19____ by and between ______________________________

and the __________________________ Area Vo-Tech School. It covers the cooperator's participation and the instructor's responsibilities in the farm business management adult education program.

The primary objective of the program is to improve the effectiveness of the farming operation in order to assist farm families achieve their farm business and family goals and objectives. Basic concepts and techniques of modern farm management will be emphasized. At the end of the program, the cooperator should have developed an accurate, up-to-date records system, demonstrated techniques of how to use records in financial, tax, and farm planning and analysis, and have used basic analytical tools such as enterprise budgets, cash flow projections, financial statements, whole farm and detailed enterprise analyses, summary analysis, and whole farm planning.

As a cooperator enrolled in the area vo-tech school farm business management adult education program, I agree to fulfill the following responsibilities:

- I understand that the vo-tech farm business management adult education program is a three-year program that has a specific curriculum, courses of study offered in a definite sequence, and continuity between courses of study to promote attainment of farm business and family goals and objectives.
- I will keep records accurate and up-to-date to the best of my ability, using record book provided by instructor.
- I will complete record book for summary and analysis at the end of each year.
- I understand that all individual farm record data collected through this program will be kept confidential and that this data will be made available on a summary basis to all cooperators, farm management specialists, and instructors for educational purposes.
- I will pay an enrollment fee that will be negotiated annually.
- I will *regularly* attend monthly class meetings.
- I will schedule individualized on-farm instruction with instructor regularly.
- I have definite and ongoing plans of continuing in the business of farming.

ASSIGNMENT SHEET #2

B. As an instructor representing the area vo-tech school farm business management adult education program, I agree to fulfill the following responsibilities:

- I will provide a record book system to fit the individual cooperator's situation.
- I will assist the cooperator in establishing a records system and in preparing closing entries and other forms needed for the summary and analysis.
- I will conduct one class meeting per month on farm management topics.
- I will schedule individual on-farm instruction to support the total educational program.
- I will check the cooperator's record book at regular intervals for its accuracy and completeness.
- I will assist the cooperator in applying the basic analytical tools of farm management.
- I will provide the cooperator with a copy of the completed summary and analysis of the cooperator's farm and of the vo-tech farm business management program.
- I will discuss with the cooperator the results of this analysis and how it may be used to further improve the farm business.

____
Farm Cooperator

____
Farm Cooperator's Spouse (If appropriate)

____
Area Vo-Tech School Farm Business
Management Instructor

Representing ________________________
Area Vo-Tech School

ORIENTATION
UNIT I

ASSIGNMENT SHEET #3 — COMPLETE ENROLLMENT FORMS

NAME ______________________________ SCORE ______________

The purpose of this assignment sheet is to provide the farm business management instructor with some background information pertinent to each cooperator.

Name______________ ______________ Age__________ Social Security No.________

Spouse's Name____________________ Age__________ Social Security No.________

Mailing Address____

____

Home Phone___________________________ Business Phone________________

Location of Farm

____

Children's Names Ages

____

____

____

☑ Types of Enterprise(s)

☐ Dairy
☐ Beef Breeding
☐ Beef Fattening
☐ Wheat
☐ Soybeans
☐ Cotton
☐ Peanuts
☐ Swine Breeding
☐ Swine Fattening
☐ Milo
☐ Others ______________________
____

ASSIGNMENT SHEET #3

Appropriate Time for Farm Visit (Check appropriate space[s].)

8 A.M.	9	10	11	12	1 P.M.	2	3	4	5	6	
											Monday
											Tuesday
											Wednesday
											Thursday
											Friday

ORIENTATION
UNIT I

ASSIGNMENT SHEET #4 — DETERMINE CURRENT LEVEL OF EFFECTIVENESS IN TIME MANAGEMENT

NAME ______________________________ SCORE ______________

A careful look at existing time management habits is useful in determining the kind of changes that need to be made for greater effectiveness. This assignment sheet is designed to help you determine your current level of effectiveness in time management. Rate each factor with complete honesty.

Check each box to indicate your rating. When all items are rated, connect the dots to determine your personal profile for time management effectiveness. Are the majority of your time management practices satisfactory?

SCALE: 1 = Poor — Very much improvement needed
2 = Fair — Much improvement needed
3 = Good — Some improvement needed
4 = Excellent — Little improvement needed
5 = Outstanding — No improvement needed

		Needs Improvement			Satisfactory	
	Time Management Practices	1	2	3	4	5
A.	Set personal goals	☐	☐	☐	☐	☐
B.	Establish priorities	☐	☐	☐	☐	☐
C.	Develop daily time management plan	☐	☐	☐	☐	☐
D.	Implement daily time management plan	☐	☐	☐	☐	☐
E.	Achieve results daily	☐	☐	☐	☐	☐
F.	Organize work	☐	☐	☐	☐	☐
G.	Control unwanted interruptions	☐	☐	☐	☐	☐
H.	Delegate	☐	☐	☐	☐	☐
I.	Concentrate in a variety of settings	☐	☐	☐	☐	☐
J.	Avoid procrastination	☐	☐	☐	☐	☐

ASSIGNMENT SHEET #4

	Time Management Practices	Needs Improvement 1	2	3	Satisfactory 4	5
K.	Retrieve needed information quickly	☐	☐	☐	☐	☐
L.	Say "no" when necessary	☐	☐	☐	☐	☐
M.	Use "down" time resourcefully	☐	☐	☐	☐	☐
N.	Keep up to date	☐	☐	☐	☐	☐
O.	Streamline tasks	☐	☐	☐	☐	☐
P.	Spend quality time with others	☐	☐	☐	☐	☐
Q.	Spend appropriate quantity of time with others	☐	☐	☐	☐	☐
R.	Accomplish work during peak energy times	☐	☐	☐	☐	☐
S.	Use communication skills (sending and receiving)	☐	☐	☐	☐	☐
T.	Deal with stress	☐	☐	☐	☐	☐
U.	Control personal time	☐	☐	☐	☐	☐
V.	Use goal-directed behavior	☐	☐	☐	☐	☐
W.	Break down larger tasks into more manageable segments	☐	☐	☐	☐	☐
X.	Respond appropriately to deadlines imposed by others	☐	☐	☐	☐	☐
Y.	Respond to self-imposed deadlines	☐	☐	☐	☐	☐
Z.	Organize work space	☐	☐	☐	☐	☐
AA.	Control telephone time	☐	☐	☐	☐	☐
BB.	Control "after-hours" time	☐	☐	☐	☐	☐
CC.	Allow time for thinking and planning	☐	☐	☐	☐	☐

ORIENTATION
UNIT I

ASSIGNMENT SHEET #5 — COMPLETE A "THINGS TO DO" LIST

NAME ______________________________ SCORE ______________

The purpose of this assignment sheet is to encourage you to develop a written list of activities that need to be completed.

Write activities that you wish to accomplish tomorrow under the heading "things to do today." Next, rate the importance of the activity. Write an "A" for activities that *must* be accomplished tomorrow and that are essential for completing your goals and objectives, a "B" for activities that you would like to accomplish tomorrow but that could be put off until another day, and a "C" for activities that you could do any time. As you complete activities, write your initials in the last column.

Date Prepared: ____

Priority	**Things to Do Today**	**Initial When Completed**

ORIENTATION
UNIT I

ASSIGNMENT SHEET #6 — DETERMINE THE BASIC VALUES OF THE FARM FAMILY FOR SETTING GOALS AND OBJECTIVES

NAME ______________________________ SCORE ______________

The purpose of this assignment sheet is to assist the farm family in determining their attitudes toward various goals and objectives. Each of the farm family team members should complete the assessment form individually and then meet to determine the consensus of the team's opinion.

Use the form that follows to determine the basic values of the farm family for setting goals and objectives. Complete the form using the rating scale below. Place the appropriate rating in the correct column.

SCALE: 5 — Very important
4 — Important
3 — Desirable
2 — Not important
1 — Not needed

Goals and Objectives	Husband	Wife	Family Member	Family Member	Team Consensus
Owning a farm					
Education for children					
Building a new home					
Freedom from debt					
A good retirement nest egg					
A high level of peace of mind					
Regularly planned family recreation					
A high degree of self-discipline					
Nearly new machinery					
Sharing love between family members					
Being neighborly					

ASSIGNMENT SHEET #6

Goals and Objectives	Husband	Wife	Family Member	Family Member	Team Consensus
Good registered breeding stock					
Adequate medical care					
Plenty of wholesome food					
Adequate life insurance					
Prestige as a farm family					
Books and magazines to read					
Attractive clothing					
Time to watch television					
Well-kept farmstead or ranch					
Other					

ORIENTATION
UNIT I

ASSIGNMENT SHEET #7 — ESTABLISH FARM BUSINESS AND FAMILY GOALS

NAME ______________________________ SCORE ______________

This assignment sheet is the yardstick for the entire program. Clear goals and well-defined objectives provide an outline for using available resources, setting priorities, and measuring success. It is essential that adequate time and consideration be given to completing this assignment sheet.

Writing goals constitutes a two-step process. First, goals must be clarified. These are the material and personal aspirations the cooperator feels are most important. Goals describe purposes for the farm business and family in nonquantifiable terms. Next, objectives are established to assist the cooperator in attaining the goals. Objectives must be specific, measurable, realistically attainable, and constructive, and must represent an improvement over the present level of achievement. Simply stated, goals are broad, and objectives are specific.

Goals and objectives may be family or farm business oriented. They also may apply to different time periods: *short-term*, less than one year; *intermediate-term*, one to seven years; and *long-term*, over seven years.

Use the following guidelines to clarify your farm business and family goals and to establish objectives.

- Allow family members to participate
- Recognize individual and family differences
- Recognize farm and family characteristics

  EXAMPLES: Size of family; stage in family life cycle; size and type of farm business; social, cultural, and religious values; financial structure of farm business

- Recognize time periods
- Select goals in terms of available resources
- Know that competition between goals is normal
- Modify goals and objectives as resources and ideals change

ASSIGNMENT SHEET #7

Family and Farm Business Goals

What do you as a family consider most important for your future welfare, happiness, and security? One of the steps for improving the farm business is to clarify what is wanted. Is it community involvement, a retirement plan, college education for the children, a comfortable home, or a partnership farming operation? You may know of things you have wanted as a family, but it takes considerable thought and discussion among family members to agree upon what is most important and which things come first.

Write below the goals that you want for your family and farm business. Identify them in order of importance. Be sure to involve all family members in making these decisions.

Family Goals
Short-term (less than one year)
Intermediate-term (one to seven years)
Long-term (over seven years)
Farm Business Goals
Short-term (less than one year)
Intermediate-term (one to seven years)
Long-term (over seven years)

ORIENTATION
UNIT I

ASSIGNMENT SHEET #8 — DEVELOP OBJECTIVES FOR FARM BUSINESS AND FAMILY GOALS

NAME ________________________________ SCORE ____________

The size and complexity of your farm operation will determine how in-depth your objectives need to be. Each objective must be realistic, attainable, and measurable; and each objective must be compatible with each other objective.

Here are some general categories of goals, with some examples of various types of objectives that you might want to consider.

A. Volume and profit goals: Production objectives, profit objectives, return on investments, return on equity capital

EXAMPLE: Increase cash grain sales by 12 percent per year over five years.

B. Growth and diversification goals: New enterprises, acquisitions or expansion, improved production methods

EXAMPLE: Acquire enough rangeland to support a 200-head cow/calf operation.

C. Financial goals: Credit needs, cash flow objectives, current and future income objectives

EXAMPLE: Increase borrowing capacity to $2.3 million for land acquisition in 1988.

D. Organizational and management goals: Changes in organizational structure, plans for management or ownership succession

EXAMPLE: Incorporate and transfer 5 percent of stock to sons each year for ten years.

An objective needs to be a specific "what." You will want to word each objective as specifically as possible, and to reword and redefine goals as necessary.

Some objectives may need further defining if several farm enterprises or operations will affect the accomplishment of the objective. These subobjectives are really the strategies of their major objectives

EXAMPLE:

Objective: Increase gross profits by 100 percent by 1988.

Subobjective: (Dairy) Increase milk sales 15 percent per year for five years; and increase gross profit 20 percent per year for five years.

ASSIGNMENT SHEET #8

Now that you know where you want to go, make plans to get there. These subobjectives are the "how." They must be specific, measurable, realistically attainable, and constructive, and must represent an improvement over the present level of achievement.

EXAMPLE:

Objective: Increase milk sales by 40,000 pounds per year for five years.

Subobjectives:

A. Increase herd size by two cows per year.

B. Increase herd average by 500 pounds per year.

Objective: Hold cost increases to 11.5 percent per year.

Subobjectives:

A. Construct new 25-by-60-foot silo in 1986 and complete switch from bales to haylage.

B. Increase alfalfa to 6.5 tons per acre over five years.

C. Test all forage for protein content and follow university feeding program.

Even the best plans are worthless if they are filed away and not used. Goals and objectives are a working tool. After the first year of your plan, you will want to measure your progress and see if your goals are still realistic. Are your objectives working, or are new approaches required? Because conditions change, you must change. A plan does not mean that you are locked in. Do not abandon your overall goals, just adjust the means or the plan for getting there.

On the following pages, develop objectives for the farm business and family goals decided upon in Assignment Sheet #7. Your first plan may not be a masterpiece, but it is a start. You will be surprised with how even a simple plan can help you achieve and measure your progress toward your goals and objectives.

(NOTE: Objectives should be set in quantitative terms in order to measure progress toward their attainment. See example on the following page. Evaluate the achievement of your objectives at the end of the year.)

Remember the old saying: "How are you going to get there if you don't know where you are going?"

ASSIGNMENT SHEET #8

Example:

GOALS	OBJECTIVES	Evaluation										COMMENTS
		Difficulty of the Objective					Achievement of the Objective					
		Extremely Difficult	Difficult	Some Difficulty	Easy	Extremely Easy	Exceeded	Achieved	Partially Met	Little Done	No Activity	
Family												
Provide educational fund for family members	Deposit $50.00 a month in educational savings account for son's college education		X					X				Deposited $600.00 during year Difficult to deposit $50.00 each month
Improve home	Build new home by 1987	X									X	Net farm income has been very low
Farm Business												
Increase income	Increase net farm income by 10 percent each accounting period	X							X			Drought two years ago; low prices this year; may need to change to a more realistic objective
	Achieve $150.00 returns above total operating costs for 1986 peanut crop		X				X					Achieved $176.30 returns above total operating costs
Increase number of acres farmed	Rent additional 160 crop acres in 1986			X				X				Rented 160 acres; cash rent; good wheat crop
	Purchase 160 acres by 1987	X								X		Contacted real estate broker

ASSIGNMENT SHEET #8

FARM BUSINESS

GOALS	OBJECTIVES	Evaluation										COMMENTS
		Difficulty of the Objective					Achievement of the Objective					
		Extremely Difficult	Difficult	Some Difficulty	Easy	Extremely Easy	Exceeded	Achieved	Partially Met	Little Done	No Activity	

ASSIGNMENT SHEET #8

FARM BUSINESS

GOALS	OBJECTIVES	Evaluation										COMMENTS
		Difficulty of the Objective					Achievement of the Objective					
		Extremely Difficult	Difficult	Some Difficulty	Easy	Extremely Easy	Exceeded	Achieved	Partially Met	Little Done	No Activity	

ASSIGNMENT SHEET #8

FAMILY

GOALS	OBJECTIVES	Evaluation										COMMENTS
		Difficulty of the Objective					Achievement of the Objective					
		Extremely Difficult	Difficult	Some Difficulty	Easy	Extremely Easy	Exceeded	Achieved	Partially Met	Little Done	No Activity	

ASSIGNMENT SHEET #8

FAMILY

GOALS	OBJECTIVES	Evaluation										COMMENTS
		Difficulty of the Objective					Achievement of the Objective					
		Extremely Difficult	Difficult	Some Difficulty	Easy	Extremely Easy	Exceeded	Achieved	Partially Met	Little Done	No Activity	

ORIENTATION
UNIT I

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1 — Evaluated to the satisfaction of the instructor

Assignment Sheet #2 -- Evaluated to the satisfaction of the instructor

Assignment Sheet #3 — Evaluated to the satisfaction of the instructor

Assignment Sheet #4 — Evaluated to the satisfaction of the instructor

Assignment Sheet #5 — Evaluated to the satisfaction of the instructor

Assignment Sheet #6 -- Evaluated to the satisfaction of the instructor

Assignment Sheet #7 — Evaluated to the satisfaction of the instructor

Assignment Sheet #8 — Evaluated to the satisfaction of the instructor

ORIENTATION
UNIT I

TEST

NAME ____________________________________ SCORE ______________

1. Match to their correct definitions terms associated with farm business management and goal setting. Write the correct numbers in the blanks.

_____a. Combination of economic analysis and business control, and the management of biological processes within the context of changing technical, legal, and human environments

_____b. Participant in the farm business management program

_____c. Instructional materials from which information is presented in the classroom or used in on-farm instruction

_____d. Planned sequence of learning activities

_____e. Scheduled, planned individual learning activity that occurs at the cooperator's farm or ranch

_____f. Scheduled, planned group learning activity that occurs at a specified meeting place

_____g. Effective control of time

_____h. Broad statements that can be classified

_____i. Specific statements that are measurable and realistically attainable

_____j. Person who earns a living by farming or ranching; one who operates or manages a farm or ranch

1. Curriculum
2. Goals
3. Class meeting
4. Farm business management
5. Course of study
6. Individual on-farm instruction
7. Cooperator
8. Time management
9. Objectives
10. Farmer

2. Select from the following list components of a strong farm business management adult education program. Write an "X" in the blank before each correct answer.

_____a. Goal orientation

_____b. Established data base

TEST

_____c. Consulting service

_____d. Farm record analysis

_____e. No class meetings

_____f. Planned course of study

_____g. Personalized instruction

_____h. Technical support

_____i. Record-keeping service

3. State the primary objective of a farm business management adult education program.

____

____

____

4. State three basic questions a farm business management program should answer.

a. ____

b. ____

c. ____

5. State three benefits of a farm business management program.

a. ____

____

b. ____

____

c. ____

____

TEST

6. Match areas of farm business management instruction to their correct descriptions. Write the correct numbers in the blanks.

_____a. Develops skills in keeping accurate, up-to-date records for use in analyzing the farm business

_____b. Uses financial statements to determine need for credit, cost of credit from alternate sources, and payback capabilities

_____c. Helps to maximize after-tax income and stabilize income from year to year

_____d. Identifies strengths and weaknesses of the farm business, assesses financial progress, and makes necessary corrections to improve future profitability of the farm business

_____e. Assesses advantages and disadvantages of forward contracting, hedging, and other marketing strategies; then selects best alternative in keeping with the farm's position, attitude toward risk, and farm business and family goals and objectives

_____f. Evaluates machinery size, efficiency, and costs within farm constraints

_____g. Reduces variability of income through flexibility, diversification, skillful marketing, financial reserves, insurance, irrigation, and other strategies

_____h. Develops and evaluates different alternate farm plans, using available resources and planning tools to attain farm business and family goals and objectives

_____i. Survey alternate forms of business organization and their advantages and disadvantages

_____j. Helps to minimize transfer costs consistent with objectives of the owner

1. Financial management
2. Machinery economics
3. Estate planning
4. Record keeping
5. Marketing
6. Long-range planning
7. Credit planning and analysis
8. Farm business organizations
9. Income tax management
10. Risk management

TEST

7. State the role of a farm business management program instructor.

____

____

____

8. Select from the following list elements of farm business management program organization. Write an "X" in the blank before each correct answer.

_____a. Unlimited class size

_____b. Specific units of instruction offered in a definite sequence over a specified period of time

_____c. Instruction in the classroom only

_____d. Continuity between units of instruction leading toward accomplishment of farm business and family goals and objectives

_____e. Limited class size

_____f. Units of instruction offered as needed

_____g. Instruction in the classroom and on the farm

_____h. Enrollment fees to help pay for instructional materials

9. List factors to consider in decision making.

a. Complexity of decision

1) ____

2) ____

b. Frequency of decision

1) ____

2) ____

c. Variables

1) ____

2) ____

TEST

10. Discuss strategy for decision making.

____

____

____

11. Arrange in order steps in a systematic decision-making process. Write a "1" before the first step, a "2" before the second step, and so on.

______a. Gather information about solutions

______b. Put decision into effect

______c. Evaluate solutions

______d. Define problem

______e. Evaluate and accept consequences

______f. Make decision consistent with goals and objectives

12. State two advantages of systematic decision making.

a. ____

b. ____

13. Match to their correct descriptions types of activities a farmer faces. Write the correct numbers in the blanks.

______a. Activities that spring from yesterday's problems, not from today's opportunities

______b. Activities that bring results and that are most essential to long-range goals

______c. Activities that must be performed but are not critical enough to rate as important

______d. Activities that when completed contribute nothing important

______e. Activities that interfere with getting anything done

1. Required
2. Other
3. Urgent
4. Routine
5. Important

TEST

14. Arrange in order the five-step process of time management. Write a "1" before the first step, a "2" before the second step, and so on.

_____a. Measure the use of time

_____b. Control time wasters

_____c. Determine where time should be spent

_____d. Order priorities

_____e. Determine how time is currently being spent

15. State four suggestions for organizing a schedule.

a. ____________________

b. ____________________

c. ____________________

d. ____________________

16. List three advantages and three disadvantages of setting goals and objectives.

a. Advantages

1) ____________________

2) ____________________

3) ____________________

b. Disadvantages

1) ____________________

2) ____________________

3) ____________________

17. List five examples of farm business and family goals.

a. ____________________

b. ____________________

c. ____________________

TEST

d. ______

e. ______

18. Discuss reasons for setting goals and objectives.

______

______

______

19. State four guidelines for setting goals and objectives.

a. ______

b. ______

c. ______

d. ______

20. Distinguish among short-term, intermediate-term, and long-term goals and objectives. Write an "S" for short-term, an "I" for intermediate-term, and an "L" for long-term goals.

______a. Require more than seven years for achievement

______b. Require less than one year for achievement

______c. Provide sense of direction

______d. Usually require one to seven years for achievement

______e. Provide basis for long-term goals and objectives

______f. Provide immediate satisfaction

21. List two factors for determining priority of goals and objectives.

a. ______

b. ______

22. State three examples of goals that compete for time, money, and earnings.

a. ______

b. ______

c. ______

TEST

23. Select from the following list techniques for achieving goals and objectives. Write an "X" in the blank before each correct answer.

_____a. Stick to goals and objectives regardless of situation

_____b. Check progress regularly

_____c. Use saved time and effort wisely and effectively

_____d. Use management-by-crisis techniques

_____e. Organize efforts on a "things to do" worklist

_____f. Do not set priorities

_____g. Check for slow or nonmoving activities

_____h. Modify goals and objectives as resources change or as the family is able to use resources more efficiently

(NOTE: Test questions 24-31 list the assignment sheets. They are an important part of this test. If they have not been completed, check with your instructor.)

24. Complete a vo-tech farm business management education program questionnaire.

25. Complete a vo-tech farm business management education program agreement.

26. Complete enrollment forms.

27. Determine current level of effectiveness in time management.

28. Complete a "things to do" list.

29. Determine the basic values of the farm family for setting goals and objectives.

30. Establish farm business and family goals.

31. Develop objectives for farm business and family goals.

ORIENTATION
UNIT I

ANSWERS TO TEST

1.

a.	4	f.	3
b.	7	g.	8
c.	1	h.	2
d.	5	i.	9
e.	6	j.	10

2. a, b, d, f, g, h

3. To improve the effectiveness of the farming operation in order to assist farm families achieve their farm business and family goals and objectives

4. Answer should include the following
   a. Where am I?
   b. Where do I want to be?
   c. How can I best get there from here?

5. Answer should include any three of the following
   a. Improves cooperator's ability to survive as a farmer or rancher
   b. Allows cooperator to identify farm business and family goals and objectives
   c. Increases cooperator's knowledge about farm business performance
   d. Allows cooperator to develop a strong and stable agriculture, which gives strength to the community

6.

a.	4	f.	2
b.	7	g.	10
c.	9	h.	6
d.	1	i.	8
e.	5	j.	3

ANSWERS TO TEST

7. To train farm families to recognize their farm problems; to evaluate related facts obtained from farm records and other reliable sources; to evaluate alternatives, and to make decisions based on their evaluation

8. b, d, e, g, h

9. Answer should include the following
   - a. Complexity of decision
     - 1) Major
     - 2) Minor
   - b. Frequency of decision
     - 1) Once in a lifetime
     - 2) Daily
   - c. Variables
     - 1) Collection of continuing data
     - 2) Dependence on other forces

10. Discussion should include the following
    - a. Reduce number of daily decisions
    - b. Collect data and compare alternatives
    - c. Order priorities from least to most important

11. a. 2
    b. 5
    c. 3
    d. 1
    e. 6
    f. 4

12. Answer should include any two of the following
    - a. Achievement of outcomes closely related to goals
    - b. Timeliness in decision making
    - c. Better-organized thought processes

ANSWERS TO TEST

13.
- a. 3
- b. 5
- c. 1
- d. 4
- e. 2

14.
- a. 3
- b. 5
- c. 2
- d. 4
- e. 1

15. Answer should include any four of the following

- a. Get an early start
- b. Streamline paperwork
- c. Start tomorrow's tasks today
- d. Keep a notebook handy
- e. Keep your time schedule flexible for priority activities
- f. Take charge of your emotions
- g. Get regular exercise

16. Answer should contain three advantages and three disadvantages

- a. Advantages
  - 1) Shows where you are going
  - 2) Distinguishes between major and minor goals and objectives
  - 3) Gives purpose and direction to decisions and actions
  - 4) Prepares you to meet the future
- b. Disadvantages
  - 1) Takes time to decide on goals and objectives
  - 2) Is difficult to come to grips with the many, and often conflicting, goals and objectives

ANSWERS TO TEST

   3) May lead to indecision or lack of confidence when trying to determine priorities

   4) Becomes more difficult as problems become more numerous

   5) Appears to be a waste of time when farmers fail to see need for goals or objectives

17. Answer should include any five of the following
    - a. Owning a farm
    - b. Building a house
    - c. Providing education for children
    - d. Control of a larger farm business
    - e. Being a good neighbor
    - f. Having more leisure time
    - g. Being a community leader
    - h. Improving the family's standard of living
    - i. Having a neat, well-kept farmstead or ranch

18. Discussion should include the following
    - a. To determine what is worthwhile
    - b. To explain why one thing and not another is done
    - c. To create permanent goals and objectives

19. Answer should include any four of the following
    - a. Should be yours
    - b. Should be written
    - c. Should be realistic and attainable
    - d. Should have target dates

ANSWERS TO TEST

- e. Should be compatible
- f. Should not be activities

20.
- a. L
- b. S
- c. L
- d. I
- e. I
- f. S

21. Answer should include any two of the following
- a. Dollar value
- b. Time
- c. Importance
- d. Resources

22. Answer should include any three of the following
- a. Improving capital base
- b. Scheduling time to manage the business
- c. Providing family comfort or convenience
- d. Improving farmstead or ranch property
- e. Providing time for recreation

23. b, c, e, g, h

24. Evaluated to the satisfaction of the instructor

25. Evaluated to the satisfaction of the instructor

26. Evaluated to the satisfaction of the instructor

27. Evaluated to the satisfaction of the instructor

ANSWERS TO TEST

28. Evaluated to the satisfaction of the instructor

29. Evaluated to the satisfaction of the instructor

30. Evaluated to the satisfaction of the instructor

31. Evaluated to the satisfaction of the instructor

RECORD KEEPING
UNIT II

UNIT OBJECTIVE

After completing this unit, the cooperator should be able to determine the record information needed for the farm business. The cooperator should also be able to complete posting of receipts and expenditures in a record book. The cooperator will show this knowledge by completing assignment sheets and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the cooperator should be able to

1. Match terms associated with record keeping to their correct definitions.
2. State reasons for keeping farm records.
3. Match types of records to their correct uses.
4. State factors to consider in selecting a records system best suited to the farm operation.
5. Match levels of farm record keeping to their correct definitions.
6. Complete record information needed for various types of farm business analyses.
7. Distinguish between cash method and accrual method of reporting farm income.
8. State advantages and disadvantages of cash method.
9. State advantages and disadvantages of accrual method.
10. State tips for keeping records.
11. Arrange in order steps in record keeping.
12. State suggestions for making entries in a farm record book.
13. Match types of farm income to their correct definitions.
14. List types of nonfarm income.
15. Match types of farm expenses to their correct definitions.
16. List types of nonfarm expenses.
17. Select from a list benefits of a cash flow summary.

OBJECTIVE SHEET

18. Match types of credit records to their correct uses.
19. State purposes of keeping hired labor records.
20. Select from a list reasons for keeping nonfarm business and family-living records.
21. Determine record information needed for the farm business.
22. Complete posting of farm and nonfarm receipts.
23. Complete posting of farm and nonfarm expenditures.
24. Complete a cash flow summary form.
25. Complete an accounts receivable form.
26. Complete accounts payable and credit records.
27. Complete a hired labor record form.
28. Complete posting of family-living records.

RECORD KEEPING
UNIT II

SUGGESTED ACTIVITIES

I. Unit contents

    A. Objective sheet

    B. Suggested activities

    C. Supplements

        1. Supplement #1 — Receipts and Expenditures Quiz and Answers

        2. Supplement #2 — Management Traits Common to Successful Farmers

    D. Information sheet

    E. Assignment sheets

        1. Assignment Sheet #1 — Determine Record Information Needed for the Farm Business

        2. Assignment Sheet #2 — Complete Posting of Farm and Nonfarm Receipts

        3. Assignment Sheet #3 — Complete Posting of Farm and Nonfarm Expenditures

        4. Assignment Sheet #4 — Complete a Cash Flow Summary Form

        5. Assignment Sheet #5 — Complete an Accounts Receivable Form

        6. Assignment Sheet #6 — Complete Accounts Payable and Credit Records

        7. Assignment Sheet #7 — Complete a Hired Labor Record Form

        8. Assignment Sheet #8 — Complete Posting of Family-Living Records

    F. Answers to assignment sheets

SUGGESTED ACTIVITIES

G. Test

H. Answers to test

II. Instructor's guide

A. Order materials to supplement unit.

1. *Oklahoma Young Farmer Record Book* and *Record Book* binder.

   (NOTE: Order from the State Department of Vocational and Technical Education, Curriculum and Instructional Materials Center, 1500 West Seventh Avenue, Stillwater, Oklahoma 74074.)

2. Current edition of *Farmer's Tax Guide*.

   (NOTE: The *Farmer's Tax Guide* is available from the Department of Treasury, Internal Revenue Service, Washington, D.C. Internal Revenue Service regulations and publications change frequently. Always use the most current information available. Caution should be used when using materials more than one year old.)

B. Encourage cooperators to bring a calculator to class.

C. Make transparencies of appropriate record book forms.

D. Make transparencies or copies of the supplements as appropriate.

E. Provide cooperators with objective sheet.

F. Discuss unit and specific objectives.

1. Emphasize the importance of keeping complete and accurate records.

   EXAMPLE: Discuss selected items for state and area comparative analysis, and compare with cooperators' answers. Do cooperators know their true costs of production?

2. Discuss need for a system for recording and sorting information.

   EXAMPLES: Emphasize the importance of record keeping by explaining the cartoon where the farmer comes in to the banker with a barn door under his arm and says, "Banker, you said before you'd loan me any more money I'd hafta bring in my bookkeepin' system. You jist don't know what heck I had takin' this barn door off!"

   Discuss record systems currently being used and strengths and weaknesses of each.

G. Provide cooperators with information and assignment sheets.

SUGGESTED ACTIVITIES

H. Discuss information and assignment sheets.

(NOTE: This unit may take more than one class period to complete.)

1. Discuss Objective 1, pointing out the importance of defining terms for common understanding.

2. Before discussing Objective 2, use Supplement #2 to show management traits common to successful participants in the Minnesota Farm Management program. When discussing Objective 2, emphasize the management reasons for keeping records. Although record keeping for tax purposes is probably the number one reason most people start keeping records, if the farmer is to survive and reach family and farm business goals and objectives, records for management are essential.

3. Discuss Objective 3, explaining the types of records in a record book.

   EXAMPLES: *Financial* — Receipts, expenditures, inventory, credit records, financial statements

   Physical — Supplemental records, records of head and pounds in receipt, expense and inventory section; returns per unit in summary analysis

4. When discussing Objective 4, emphasize the importance of selecting a record system that will deliver the information the cooperator wants and needs.

5. Discuss Objective 5, pointing out that each level requires a more sophisticated record system, including more detailed information about the farming operation.

6. Discuss Objective 6, explaining the information needed for each type of desired farm business analysis. Assist operator in completing Assignment Sheet #1. This assignment sheet should help you and the cooperator determine the amount of time needed for individual on-farm instruction. Make a copy of Assignment Sheet #1 for your file on the cooperator.

7. Discuss Objectives 7 through 9, introducing methods of reporting farm income. Point out that most farmers use the cash method of accounting to report farm income. These instructional materials are based on the assumption that everyone will be using the cash method.

SUGGESTED ACTIVITIES

8. Discuss Objective 10. Emphasize the importance of keeping both financial and physical record information. Point out that one successful method of keeping records is "bank statement accounting": posting each month's bank statement as it is received, and using beginning and ending bank statement balances as an accuracy check. End-of-year (December) and beginning-of-year (January) bank statements would have to be reconciled to make sure that income and expenses are accounted for in the correct year for tax purposes.

9. Discuss Objective 11. Stress that all beginning-of-year inventories must include a list of all assets, all liabilities, and an accurate beginning cash balance. Point out units in the course of study in which each step will be discussed.

10. When discussing Objective 12, emphasize the importance of developing good record-keeping habits and keeping records up to date.

11. Before discussing Objective 13, discuss farm records and techniques or systems now used by class members. Use transparencies to illustrate the pages in the *Oklahoma Young Farmer Record Book*, farm receipts section. Discuss the importance of being familiar with each section of the record book. It might be helpful to distribute a copy of the IRS *Farmer's Tax Guide* to each cooperator. Discuss Objective 13, using transparencies to show where each type of farm income should be entered.

12. Discuss Objective 14, using transparencies to show where nonfarm income should be entered. After completing discussion of Objectives 13 and 14, have cooperators complete Assignment Sheet #2.

13. Discuss Objectives 15 and 16. Use transparencies to illustrate the farm expenditures section of the *Oklahoma Young Farmer Record Book*. Use transparencies to show where each type of farm or nonfarm expenditure should be entered. After completing discussion, have cooperators complete Assignment Sheet #3.

14. Discuss Objective 17. Use transparencies to illustrate a cash flow summary form. Emphasize the cash flow summary form's importance as an accuracy check when used in conjunction with a bank statement. Explain that farm income and expenses are divided into various tax categories on the cash flow summary form. Point out the importance of determining the correct beginning-of-year cash balance. Have cooperators complete Assignment Sheet #4.

15. Review receipts and expenditures discussion by having cooperators complete Supplement #1, "Receipts and Expenditures Quiz." Encourage cooperators to refer to their cash flow forms to check their answers. Discuss correct answers. Instructor should be prepared to point out answers in *Farmer's Tax Guide* and to give additional examples.

SUGGESTED ACTIVITIES

16. Discuss Objective 18, using transparencies to illustrate credit form and to supplement Assignment Sheets #5 and #6. Emphasize the importance of correct beginning-of-year balances for net worth statements and farm analysis purposes. Have cooperators complete Assignment Sheets #5 and #6.

17. Become familiar with current Social Security (FICA) and employer/employee taxes in *Farmer's Tax Guide* before discussing Objective 19. Use a transparency to illustrate Hired Labor Record form to supplement Assignment Sheet #7. Have cooperators complete Assignment Sheet #7.

18. Discuss Objective 20. Emphasize that nonfarm business and family income and expenses may greatly affect the achievement of farm business goals. Point out the importance of identifying these nonfarm sources. Use transparencies to illustrate family-living and nonfarm record forms and to supplement Assignment Sheet #8. Have cooperators complete Assignment Sheet #8.

19. Provide additional instruction on farm records to cooperators who choose to use a computerized farm records program.

20. Develop a sample bank statement exercise for those cooperators needing additional assistance. It is suggested that such an exercise include January and February bank statements, including canceled checks and deposit slips, forms for recording income and expenses, and a cash flow summary form.

21. Enlarge *Record Book* forms to use as bulletin board display.

I. During scheduled on-farm instruction, have cooperators post January bank statement (if available) to check for accuracy and completeness. Encourage cooperator to compile a list of assets and liabilities as of January 1. This information will be discussed in Unit III, "Inventory and Net Worth Statement."

J. Give test.

K. Critique test.

L. Reteach if necessary.

III. Unit references

A. Albracht, James. *Kansas Postsecondary Farm and Ranch Management Project: Farm Management Basic Core Curriculum*. Pittsburg, Kansas: Pittsburg State University/Vocational Curriculum Materials Center, n.d.

SUGGESTED ACTIVITIES

B. Denker, Robert, et al. *Unit I for Farm Business Management Analysis: Establishing a Farm Accounting System*. Columbia, Missouri: Instructional Materials Laboratory/University of Missouri-Columbia, 1981.

C. *Farmer's Tax Guide: 1982 Edition,* Publication 225, rev. Washington, D.C.: Department of the Treasury, Internal Revenue Service, 1982.

D. Hardin, Mike L., and Joseph E. Williams. *Oklahoma Young Farmer Record Book*. Stillwater, Oklahoma: State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1981.

E. Hodgens, Jim, and Leland Myers. *Farm Business Management Year 1*. Stillwater, Oklahoma: State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1979.

F. James, Sydney C., and Everett Stoneberg. *Farm Accounting and Business Analysis*. Ames, Iowa: Iowa State University Press, 1981.

G. Osburn, Donald D., and Kenneth C. Schneeberger. *Modern Agriculture Management*. Reston, Virginia: Reston Publishing Company, Inc., 1978.

H. Painter, Charles M. *Using Farm Analysis Information*. White Bear Lake, Minnesota: Minnesota Instructional Materials Center, 1977.

I. Steward, Jim. *Farm Business Management Volume II*. Stillwater, Oklahoma: State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1981.

SUGGESTED ACTIVITIES

SUPPLEMENT #1 — RECEIPTS AND EXPENDITURES QUIZ AND ANSWERS

NAME ____ SCORE __________

Listed below are a number of receipts and expenditures. In the blank before each item, write the column number from the *Oklahoma Young Farmer Record Book* that indicates where the item should be entered in the *Record Book*.

EXAMPLE: __28__ Purchased 100 pounds cattle cubes

__48__ Purchased new swather

_____ 1. Cost of repair to cattle feeder

_____ 2. Purchased 2 tons of complete sow pellets

_____ 3. Received check from AMPI for milk sold

_____ 4. Received money from bank loan

_____ 5. Purchased 10-20-10 fertilizer for wheat

_____ 6. Sold ten cull cows from breeding herd

_____ 7. Received patronage refund

_____ 8. Purchased new storm door for home

_____ 9. Paid farm magazine subscription

_____ 10. Purchased insurance on farm machinery and equipment

_____ 11. Sold swather

_____ 12. Sold 5,000 bushels of wheat

_____ 13. Purchased 50 head of stocker calves

_____ 14. Purchased dirt fill for new barn

_____ 15. Paid for tune-up on farm truck

_____ 16. Purchased socket wrench set for farm use

_____ 17. Sold twenty-five raised calves

_____ 18. Purchased posts for fence repairs

_____ 19. Cost of farm postage

_____ 20. Bank service charge on checking account

SUGGESTED ACTIVITIES

_____21. Cost of enrollment for Farm Business Management program

_____22. Purchased seed wheat

_____23. Paid veterinary bill on livestock

_____24. Income from custom combining

_____25. Sold thirty calves purchased for grazing out wheat pasture

_____26. Paid cash rent for pastureland

_____27. Received mineral lease bonus from oil company

_____28. Purchased steel bolts for bolt bin in farm shop

_____29. Purchased straw for bedding

_____30. Paid auto insurance premiums (50% farm, 50% personal)

_____31. Purchased anhydrous for wheat

_____32. Cost of gasoline for farm

_____33. Storage payments for grain

_____34. CCC loan for wheat to be counted as income this year

_____35. Purchased groceries for home use

_____36. Paid hired hand

_____37. Received deficiency payment from ASCS

_____38. Paid loan at bank ($14,000 principal and $1,525 interest)

_____39. Paid for custom harvest of wheat

_____40. Paid artificial insemination fees

_____41. Paid federal income tax

_____42. Purchased employee's meal

_____43. Paid for LP gas for crop drying

_____44. Paid for construction of terraces

_____45. Paid ad valorem taxes on farm property

_____46. Received $50 cash gift from Aunt Mary

_____47. Off-farm salary and deductions from check

SUGGESTED ACTIVITIES

SUPPLEMENT #1 — ANSWERS TO RECEIPTS AND EXPENDITURES QUIZ

1. 26
2. 28
3. 9 or 10
4. 20
5. 30
6. 17 or 18
7. 7
8. 51
9. 34
10. 39
11. 19
12. 1, 2, 3, or 4
13. 44 or 45
14. 49
15. 26
16. 32
17. 13 or 14
18. 31
19. 34
20. 34
21. 34
22. 29
23. 35
24. 6
25. 15 or 16
26. 41
27. 21
28. 32
29. 32
30. 39 and 51
31. 30
32. 36
33. 37
34. 1, 2, 3, or 4
35. 51
36. 25
37. 5
38. 50 and 27
39. 31
40. 33
41. 51
42. 25
43. 36
44. 43
45. 38
46. 51
47. 21 and 51

SUGGESTED ACTIVITIES

SUPPLEMENT #2

Management Traits Common to Successful Farmers

Follow work plan that keeps them on or ahead of schedule

Anticipate problems – repair equipment ahead of seasonal use

Ease heavy workload by doing some things during slack periods

Make no large expenditures without arithmetical calculations

Make maximum use of available resources

Set goals to which they adhere rather rigidly

Tend to be consistent

Have good credit rating

Have high sales resistance

Are ambitious

Source: *Using Farm Analysis Information*, by Charles Painter, University of Minnesota.

RECORD KEEPING
UNIT II

INFORMATION SHEET

I. Terms associated with record keeping

   A. Farm records — Historical data about a particular farm operation

   B. Receipts — Any funds, services, or materials received as income from payment for commodities, services, or loans

   C. Expenditures — Any outlay of funds or materials as payment for goods and services

   D. Farm income or expense — Receipt or expenditure that is the result of some activity within the farm business

   E. Nonfarm income or expense — Receipt or expenditure that is the result of some activity outside the farm business

   F. Cash flow summary — Historical record of monthly cash inflows and outflows for a specified period of time, usually one year

   G. Cash flow projection — Estimate of monthly cash flows over a period of time, usually one year

II. Reasons for keeping farm records

   A. To comply with tax reporting requirements and to assist in tax planning and management

   EXAMPLE: Federal and state income tax, self-employment tax, employer/employee taxes

   (NOTE: The Internal Revenue Service requires that a taxpayer *must* keep records to prepare an accurate income tax return and to ensure that the proper tax is paid.)

   B. To measure financial success and progress of farm business over time

   EXAMPLES: Financial statements, whole farm and detailed enterprise analyses

   C. To establish a factual basis for comparisons with past years, with goals that have been set, and with the performance of other comparable operations

   EXAMPLES: State and area comparative summary, cooperator's goals and objectives

INFORMATION SHEET

D. To aid in planning for the future by providing data that will help in estimating the effects of operational changes on economic conditions of the farm business

EXAMPLES: Whole farm planning, risk management, cash flow projections

E. To aid in obtaining credit

EXAMPLES: Cash flow projections, repayment schedules, net worth statements

III. Types of records and their uses

A. Financial records — Indicate monetary receipts and expenditures for the business during the year

EXAMPLES: Cash flow summary, net worth statement, income statement, income tax reporting, family-living summary, nonfarm business summary

B. Physical records — Record production of crop and/or livestock enterprises

EXAMPLES: Crop yield records, births, deaths, unpaid operator and family labor, weanings, acres planted, acres harvested

(NOTE: Physical records do not indicate anything about the financial position or outcome of the farm.)

IV. Factors to consider in selecting a farm records system best suited to the farm operation

A. Amount of information wanted and in what detail

B. Amount of time devoted to record keeping

C. Record-keeping ability

V. Three levels of farm record keeping

A. Tax purposes — Record of cash expenditures, cash receipts, and depreciation on farm machinery and buildings

EXAMPLES: Cancelled check and shoebox method, keeping *Oklahoma Young Farmer Record Book*, keeping *Oklahoma Farm Account Book*, keeping computer record systems

(NOTE: This system meets the requirements of taxpayers who use the cash method of reporting income.)

INFORMATION SHEET

B. Taxes plus some business analysis — Organized way of taking a complete inventory and recording labor and production information

EXAMPLES: Keeping *Oklahoma Young Farmer Record Book*, keeping computer record systems

(NOTE: Many of these systems include a procedure for doing a whole farm business analysis.)

C. Complete farm business analysis — Record of cash transactions, physical quantities, inventory, depreciation, and all information necessary to complete whole farm and detailed enterprise analyses

EXAMPLES: Keeping *Oklahoma Young Farmer Record Book*, keeping computer record systems

(NOTE: This system does not reduce the amount of time put into record keeping, but it does offer the cooperator the potential for obtaining more information.)

INFORMATION SHEET

VI. Record information needed for various types of farm business analyses (Table 1; Assignment Sheet #1)

TABLE I

RECORD INFORMATION NEEDED

	Income Tax	Income Statement	Net Worth Statement	Cash Flow Statement	Whole Farm Analysis	Detailed Enterprise Analysis	Family-Living Statement
Financial Transactions							
Farm income and expenses	X	X		X	X	X	
Nonfarm tax deductions	X						X
Nonfarm income and expenses	X			X			X
Debt payments	X			X			
Inventory							
Depreciation schedule	X	X	X		X	X	
Other farm assets		X	X		X	X	
Nonfarm assets			X		X		
Record of debts			X		X		
Production Records							
Feed records					X	X	
Livestock production					X	X	
Livestock expenses						X	
Crop yields					X	X	
Crop expenses						X	
Labor Records							
Operator labor					X	X	
Family labor					X	X	
Hired labor	X				X	X	

VII. Methods of reporting farm income

A. Cash

1. Income must be reported in the year that cash, or its equivalent, is received

INFORMATION SHEET

2. Deductions for farm expense items are made in the year in which they are paid out

3. Cost of items purchased for resale is not deductible until the year the item is sold

   EXAMPLES: Items such as feeder cattle, pigs, sheep purchased for resale

   (NOTE: Profit from the sale of purchased livestock or other items is figured by deducting the cost from the sale price in the year in which the sale occurs.)

B. Accrual

1. Inventories must be used to determine gross income

2. Sales are treated as income when the price of the item is recoverable

3. Expenses are deductible when payable

VIII. Advantages and disadvantages of cash method

A. Advantages

1. Only cash income and cash expense records must be kept

   (NOTE: From a tax standpoint, inventories do not have to be considered.)

2. Choices can be made about when to incur income and when to deduct expenses

3. Cash is available to pay the tax when a profit is shown

B. Disadvantages

1. Income may be erratic

2. Expenses are not deductible until paid

3. Change in inventory must be determined to compute net farm income

IX. Advantages and disadvantages of accrual method

A. Advantages

1. Levels out hills and valleys of income without the necessity of year-end manipulations

INFORMATION SHEET

2. Is easy to determine net farm income because inventory is readily available

3. Aids in analyzing strong and weak points of farm business from year to year

B. Disadvantages

1. Requires detailed and complex records

2. Requires carrying inventory at a value determined by an approved method

   EXAMPLES: Cost; cost or market, whichever is lower; farm price; unit livestock price

3. Requires work with abstract figures

4. May show profit only on paper with no cash to pay taxes

   (NOTE: The actual cash position may be difficult to determine.)

X. Tips for keeping records

A. Develop habit of keeping your record book up to date

   EXAMPLE: Make entries regularly

B. Enter cash transactions daily or weekly

C. Enter checks as written or at least once a month

D. Deposit all farm income in your bank account

E. Identify all items on your deposit slip

   EXAMPLES: Borrowed money, gifts, receipts not subject to income tax, livestock head and pounds, crops and bushels, wages

F. Do most of your farm business by check

G. Get your bank statement each month and check your record book with it

H. Write a complete description of sales or purchase entries

   (NOTE: In making entries, always include the date of the transaction, the amount of the receipt or expense, the name of the person or firm dealt with, the kind of product sold or bought, the number of units sold or bought, and the price of each unit.)

INFORMATION SHEET

XI. Steps in record keeping

A. Enter beginning-of-year inventories

(NOTE: Be sure to include beginning balances for all accounts receivable and payable.)

B. Set up depreciation schedule

C. Enter record of receipts, expenses, and production

(NOTE: Production records may include hired labor, unpaid operator and family labor, crop and livestock production, breeding and mortality records, feed allocation, and home use.)

D. Enter end-of-year inventories

E. Complete depreciation schedule

F. Complete farm analysis

EXAMPLES: Taxes, financial statements, whole farm analysis, detailed enterprise analysis

XII. Suggestions for making entries in a farm record book

A. Become familiar with your record book before using it

(NOTE: Read carefully all directions and instructions given in your book. Study the index and practice locating various parts of the book.)

B. Use bookmarkers to identify work areas

EXAMPLE: Paper clips

C. Fill every line of each page completely before going to next page

(NOTE: Begin a new page for each month.)

D. Subtotal each page, and total the last page each month

E. Use a sharp pencil with a medium-hard lead

INFORMATION SHEET

XIII. Types of farm income

(NOTE: The *Farmer's Tax Guide* may provide additional information on farm income.)

A. Crop sales — Receipts from sale of raised crops

EXAMPLES: Wheat, alfalfa hay, peanuts, cotton, vegetables and fruits

(NOTE: Always include pounds, bushels, tons when recording crop sales.)

B. Government payments — Receipts from participation in government programs

EXAMPLES: SCS conservation program, ASCS deficiency payments, disaster payments

C. Custom work — Payment received for doing machine work for someone else

EXAMPLES: Plowing, harvesting, cultivating

D. Patronage dividends — Dividends received from a cooperative

(NOTE: Income should include both cash received and capital stock. Capital stock may be shown as a deduction, as a capital purchase, or as an account receivable.)

E. Refunds — Amounts reimbursed for an item for which farmer has taken a deduction

EXAMPLE: Expense reimbursements, insurance proceeds, rebates

F. Resales — Receipts from items purchased for resale

EXAMPLES: Baler wire, wire panels

(NOTE: If items were deducted as farm expenses, then total receipts should be entered. If items were purchased with resale in mind, then only net gain is taxable, as with livestock purchased for resale.)

G. Cash rent — Rent received from material participation in farming operation

EXAMPLE: Received share of crop production for which farmer provided land and paid a percentage of the fertilizer cost

(NOTE: Generally, the rent received for use of farmland is rental income, not farm income. If the farmer did not materially participate in the farm from which crop shares were received, the income is not farm income and must be reported as nonfarm rental income.)

INFORMATION SHEET

H. Commodity credit loans (CCC) — Proceeds received from participating in CCC loan program

(NOTE: The farmer can elect to report a CCC loan as income in the year the loan is received instead of the year the commodity is finally sold. Once a loan has been reported as income in the year received, however, all succeeding loans must be reported in the same way unless permission is obtained from the IRS to change to a different method.)

I. Crop insurance — Proceeds received as the result of crop damage

(NOTE: Generally crop insurance proceeds received must be reported in the year that they are received. However, reporting may be postponed until the following year if the cash method of accounting is used.)

J. Livestock products — Receipts from products produced by livestock

EXAMPLES: Milk, eggs, meat, wool

K. Miscellaneous — Receipts from the sale of items not included in other income categories

EXAMPLES: Timber sales, sale of sod, fuel tax credit, easement or right-of-way payment

L. Raised nonbreeding livestock — Receipts from sale of livestock not included in breeding herd

EXAMPLES: Calves, pigs, lambs, yearling steers, barrows, wethers, yearling heifers

(NOTE: When recording receipts, be sure to include number of head and pounds sold.)

M. Livestock purchased for resale — Receipts from sale of livestock purchased for resale

(NOTE: When recording receipts, be sure to include total number of head and pounds sold. For tax purposes, keep a record of the cost of the resale livestock.)

N. Capital sales — Receipts from sale of capital assets

EXAMPLES: Breeding livestock, machinery, equipment, land

(NOTE: For tax purposes, the sale of capital assets is handled separately from ordinary farm income. There are special tax rules for capital gains and recapturing depreciation.)

INFORMATION SHEET

XIV. Types of nonfarm income (Assignment Sheet #2)

A. Wages, salaries, and other earnings

(NOTE: Include gross wages as nonfarm income, and deductions as nonfarm expenses.)

B. Rental

EXAMPLES: Rent house, rent received for use of farmland, rents received in crop shares

(NOTE: This income is subject to self-employment tax.)

C. Nontaxable

EXAMPLES: Gifts from others, inheritances, life insurance proceeds, interest on tax-free bonds, Social Security benefits, money borrowed, payment from others on accounts receivable

D. Interest received

EXAMPLES: Savings account, NOW checking account, U.S. Savings Bonds

E. Investments

EXAMPLES: Dividends, stock distributions, partnership income, investment clubs

F. Depletion income

EXAMPLES: Oil and gas royalties, lease bonuses

XV. Types of farm expenses

A. Hired labor — Amounts of reasonable wages paid for regular farm labor, piecework contract labor, and other forms of labor hired to perform farming operations

EXAMPLES: Farm labor, cotton choppers, wages paid to own children, cost of boarding hired labor

(NOTE: Hired labor may be subject to Social Security tax. If the farmer is required to withhold Social Security tax from employees' cash wages, the full amount of wages before withholding is deductible.)

INFORMATION SHEET

B. Repairs and maintenance — Amounts paid for supplies necessary to maintain assets used in the farm business

EXAMPLES: Repainting, replacing of shingles and supports on farm buildings, minor overhauls of farm machinery and equipment

(NOTE: Repairs to depreciable property that substantially prolong the life of the property or that increase its value or adapt it to a different use are capital expenses. If the farmer repairs the barn roof, the cost is deductible, but if the farmer replaces the barn roof, the cost is a capital expense.)

C. Interest — Amounts paid on farm mortgages and other obligations incurred to carry on the farm business

(NOTE: If income is reported by the cash method, only amounts of interest paid during the year of payment are deductible. Generally, interest paid in advance is not deductible until due. Loan expenses, such as legal fees, commissions, and other expenses paid in obtaining a farm loan, must be prorated over the period of the loan.)

D. Feed — Amounts paid for feed to be consumed by livestock

EXAMPLES: Hay, supplements, grain, prepared feeds

(NOTE: If income is reported by the cash method, amounts paid for feed to be consumed by livestock in the year of payment are deductible in the year paid. If advance payments for feed to be consumed by livestock are made in a later tax year, the expense may be deductible in the year paid, rather than over the tax years in which the feed is consumed, only if certain guidelines are met.)

E. Seeds and plants — Amounts paid for seeds and plants used in farming

EXAMPLES: Seed wheat, alfalfa seed

(NOTE: Seeds and plants used in the garden cannot be deducted.)

F. Fertilizers, lime, and chemicals — Amount paid for materials to enrich, neutralize, or condition land used in farming, including the cost of application

(NOTE: Fertilizer, lime, and chemicals are usually current expenses, but if the value extends over several years, the expenditure could be prorated if a special election is made.)

INFORMATION SHEET

G. Machine hire — Amounts paid for hiring machinery to carry on farming operation

EXAMPLES: Plowing, custom harvest

(NOTE: Machine hire for moving earth, building ponds, or other conservation work is a deductible soil and water conservation expense or land-clearing expense if an election is made. If no election is made, no deduction is allowed, and the cost is added to the basis of the farm. Also, the cost of equipment and labor hired to build fences, bins, feeding platforms, additions to structures, or to build other assets is not deductible but is included as part of the depreciable cost.)

H. Supplies — Amounts paid for any item that was bought for use in the farm business

EXAMPLES: Small hand tools, fan belts, bolts, consumable supplies

(NOTE: Generally, an item that would otherwise be a repair is properly treated as a supply if the farmer buys a number of the items at one time in order to have them available when needed. Ordinarily an item having a useful life of more than a year should be depreciated, and the original cost should not be deducted in the year of purchase. A consistent practice is the deduction of items of relatively small cost because the amounts are too small to enter on the depreciation schedule.

I. Breeding fees — Amounts paid for breeding of farm livestock

EXAMPLE: Embryo transplant

J. Veterinary medicine — Amounts paid for veterinarian services and livestock medicine

K. Fuel and oil — Amounts paid for cost of gasoline, fuel, and oil used in farm business

EXAMPLES: Irrigation fuel, tractor diesel

(NOTE: Automobile gasoline expense is deductible only to the extent that the car is used for farm business. The cost of fuel for heating, lighting, or cooking in the home is not deductible except to the extent that these expenses are incurred for hired help or other business purposes.)

L. Storage — Amounts paid for commercial storage of farm commodities

INFORMATION SHEET

M. Taxes — Amount of taxes incurred in the farm business

EXAMPLES: Real estate and personal property taxes on farm business assets, Social Security taxes paid on hired labor, registration fees for farm vehicles

(NOTE: State and federal income taxes are not deductible as farm business expenses. Other taxes not deductible as farm taxes are self-employment tax, gift or death taxes, and taxes on property belonging to someone else.)

N. Insurance — Amounts of premiums paid for casualty insurance on assets used in the farm business and for life, health, and accident insurance policies for employees

(NOTE: A self-employed farmer may deduct premiums on insurance to pay overhead expenses while disabled. Premiums on multiyear policies must be prorated over the life of the policy even though the taxpayer is on the cash basis. Automobile insurance is usually deducted only for the business use of the car.)

O. Utilities — Percentage of amounts paid attributable to business use

EXAMPLES: Electricity, rural water, telephone

P. Cash rent — Amounts of rent paid in cash

EXAMPLES: Cash rent for cropland, lease arrangement on farm machinery

(NOTE: Rent paid in crop shares is not deductible because the costs of raising the crops have been deducted as farming expenses. Advance payments of rent can be deducted only in the year to which they apply, regardless of accounting method. A payment for standing crops, such as wheat pasture or native grass, is properly a feed deduction.)

Q. Miscellaneous — Amounts paid for items not included in other expense categories

EXAMPLES: Bank service charge, sales commissions

R. Freight and trucking — Amounts paid for transportation to market and for business travel and entertainment

(NOTE: Trucking expenses on materials used to build new buildings or make improvements on old buildings are part of the depreciable cost of the new asset or improvement. Transportation expenses in delivering livestock to the farm should be capitalized and added to the cost of the animal. Business travel and entertainment expenses are deductible, but the farmer must be very careful to preserve precise records of travel and entertainment and to show that the expense is closely related to the farm business.)

INFORMATION SHEET

S. Conservation and land clearing — Amounts paid for soil and water conservation in respect to land used for farming or for the prevention of erosion to land used in farming

T. Livestock purchased for resale — Amounts paid for livestock to be resold at another time

(NOTE: When recording expenses, be sure to include total number of head and pounds purchased. For tax purposes, the farmer cannot deduct the cost of the animals until they are sold.)

U. Capital purchases — Amounts paid for purchase of capital assets

EXAMPLE: Breeding stock, machinery, equipment, land, buildings and improvements

(NOTE: For tax purposes, the capital asset purchases are handled separately from other farm deductions. There are special rules for capitalization, depreciation, and depletion.)

XVI. Types of nonfarm expenses (Assignment Sheet #3)

A. Personal, living, and family

EXAMPLES: Itemized deductions, groceries, utilities for home, life insurance premiums, personal auto, household

B. Nonfarm business

EXAMPLES: Investments, travel to and from another job

C. Nontaxable

EXAMPLES: Gifts, fines and penalties, hobbies, principal paid

XVII. Benefits of a cash flow summary (Assignment Sheet #4)

A. Provides record of monthly cash inflows and outflows

EXAMPLES: Cash available, cash used

B. Allows an accuracy check with bank statement

(NOTE: Beginning and ending cash balances can be compared with bank statement.)

C. Allows comparison with cash flow projection

INFORMATION SHEET

XVIII. Uses for types of credit records (Assignment Sheets #5 and #6)

A. Open accounts receivable — Used for short-term loans or credit lines owed to the farm

EXAMPLES: Purchase of hay on credit, draw on salary by hired labor

B. Notes and mortgages receivable — Used for intermediate and long-term loans made by the farm

EXAMPLE: Farmer carries the financing on a tract of land sold to a neighbor

C. Open accounts payable — Used for open accounts owed by the farm

EXAMPLES: Feed bill, charge account at local co-op

D. Credit lines and short-term multipayment notes — Used for notes owed by the farm that are due within one year, and upon which several payments will or may be made

(NOTE: Credit line records may be used for recording payments made and additional borrowing incurred during the year.)

E. Intermediate and long-term multipayment note and mortgage record — Used for loans owed by the farm that are, all or in part, due after one year

EXAMPLES: Machinery note, land note

XIX. Purposes of keeping hired labor records (Assignment Sheet #7)

A. To complete tax forms

EXAMPLES: Income tax withholding, Social Security (FICA), unemployment (FUTA)

B. To determine incentive plans

EXAMPLES: Fringe benefits, rewards for good workers

C. To facilitate management

EXAMPLES: Determine efficiency of labor, determine size classification of farm

INFORMATION SHEET

XX. Reasons for keeping nonfarm business and family-living records (Assignment Sheet #8)

A. Identifying family-living receipts and expenses

EXAMPLES: Off-farm salary, groceries, utilities for home

B. Accounting for income and expenses not listed in farm records

C. Developing future family budgets

D. Identifying nonfarm business income and expenses

RECORD KEEPING
UNIT II

ASSIGNMENT SHEET #1 — DETERMINE RECORD INFORMATION NEEDED FOR THE FARM BUSINESS

NAME ______________________________ SCORE ______________

Before developing a record-keeping system, it is important for the farm family to decide what information they want from their records. The decision will influence what record information is needed to accomplish their goals in record keeping.

Carefully study the following types of farm business analyses, and think about how each would apply to your farming operation.

- Income tax — Information needed to complete federal and state income tax returns
- Income statement — Financial record reflecting the farm business profitability over a specified period of time
- Net worth statement — Summary of all assets and liabilities in the farm business at a specific time
- Cash flow statement — Listing of all cash inflows and outflows for the farm business over a specified period of time
- Whole farm analysis — Management tool to identify factors affecting profitability and efficiency of the farm business
- Detailed enterprise analysis — Management tool to identify factors affecting profitability and efficiency of various enterprises
- Family living statement — Listing of all nonfarm receipts and expenditures over a specified period of time

A. Determine the record information needed for your farm business by answering the following statements. Write an "X" in the box under the appropriate response.

		YES	NO
1.	We want to be able to complete federal and state income tax returns.	☐	☐
2.	We want an income statement at the end of each year.	☐	☐
3.	We want a net worth statement at the beginning and ending of each year.	☐	☐
4.	We want an accurate cash flow statement at the end of each year.	☐	☐
5.	We want a whole farm analysis of our farm business at the end of each year.	☐	☐
6.	We want an accurate family-living statement at the end of each year.	☐	☐

ASSIGNMENT SHEET #1

	YES	NO
7. We want a detailed analysis of [list enterprise(s)]	☐	☐

____

____

B. Review your responses. Which level of farm record keeping will best fit your situation? Write an "X" in the appropriate box.

☐ Tax purposes

☐ Tax plus some business analysis (State business analysis information needed.)

____

____

____

☐ Complete farm business analysis.

RECORD KEEPING
UNIT II

ASSIGNMENT SHEET #2 — COMPLETE POSTING OF FARM AND NONFARM RECEIPTS

NAME ______________________________________ SCORE ________________

Posting of receipts should be completed on a regular basis. When posting, be sure to include the date, total receipt, a detailed description of what the receipt was for and from whom it was received, and quantities of items sold. Post receipts in the appropriate column(s). At the close of each month, total each column. The sum of column totals should equal the sum of the Total Receipts column. These totals should be transferred to the cash flow summary form each month.

Using the following information, complete posting of farm and nonfarm receipts for January, 19__. Total all columns.

(NOTE: Some of these transactions may also require entries on other forms, but these will be considered in other assignment sheets and units.)

- January 5 — Sold 1,700 bushels of wheat at $3.50/bu to local elevator. Total receipt equals $5,950.
- January 7 — Received patronage dividend check from local cooperative for $380. Patronage dividend included retained capital stock of $475.
- January 10 — Received milk check from AMPI on sale of 24,000 pounds of milk at $11/cwt equaling $2,640. Deductions for trucking and miscellaneous expenses totaled $480. Net check was for $2,160.
- January 16 — Sold three raised Hereford 450-pound feeder heifers at $59/cwt to Oklahoma City stockyards. Deductions for commissions, yardage, and feed totaled $13.25/head. Net check was for $756.75.
- January 17 — Received milk check from AMPI on sale of 23,000 pounds of milk at $11/cwt equaling $2,530. Deductions for trucking and miscellaneous expenses totaled $460. Net check was for $2,070.
- January 20 — Sold five Holstein springer heifers to neighbor, John Doe, at $900 each. Net check was $4,500. The heifers were purchased for resale in March of last year at $500 each. The heifers weighed 700 pounds each when purchased, and 1,050 pounds each when sold.
- January 24 — Received milk check from AMPI on sale of 23,500 pounds of milk at $11/cwt equaling $2,585. Deductions for trucking and miscellaneous expenses totaled $470. Net check was for $2,115.
- January 25 — Sold 12 tons of raised alfalfa hay to neighbor, John Doe, at $95/ton.

ASSIGNMENT SHEET #2

- January 28 — Sold four cull raised Holstein cows weighing 1,400 pounds each at $33/cwt and five raised Hereford 500-pound feeder heifers at $59.50/cwt to Oklahoma City stockyards. Deductions for commission, yardage, and feed totaled $119.25. Net check was $3,216.25.

- January 29 — Traded three-year-old pickup for new pickup and $8,000 cash difference. List price on new pickup was $12,150. Old pickup remaining book value was $0.00, but auto dealer allowed a $4,150 trade-in allowance. Borrowed $7,000 from bank and paid $1,000 by personal check.

- January 31 — Wife's gross wages from teaching job at local school equal $1,500. Deductions for withholding tax, FICA, and insurance totaled $475. Net wages deposited totaled $1,025.

- January 31 — Total of three drafts written on PCA account equaling $6,125.

ASSIGNMENT SHEET #2

FORM 1.1 **PAGE** **MONTH** **19____** **FARM RECEIPTS**

LINE	Date	TOTAL RECEIPTS		DETAILED DESCRIPTION to whom, what, etc.	AMOUNT: Pounds, Bushels, Tons, etc.	CROP SALES								LINE
						KIND: write in below								
		$	¢			$	¢	$	¢	$	¢	$	¢	
				subtotals brought from preceding page										
1														1
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22														22
23														23
				subtotals to next page or totals to summary page										
						1		2		3		4		

ASSIGNMENT SHEET #2

FORM 1.2 **PAGE** **MONTH** **19___** **FARM RECEIPTS**

LINE	MISCELLANEOUS FARM RECEIPTS							
	Government Payments		Custom Work		Patron Dividends, Refunds, Resales		Cash Rent, Other	
	$	¢	$	¢	$	¢	$	¢
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ASSIGNMENT SHEET #2

FORM 1.3 **PAGE** **MONTH** **19___** **FARM RECEIPTS**

LINE		LIVESTOCK PRODUCTS				MISCELLANEOUS INCOME			
	LBS/ DOZ	KIND: write in below				KIND: write in below			
	Quantity	$	¢	$	¢	$	¢	$	¢
1									
2									
3									
4									
5									
6									
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ASSIGNMENT SHEET #2

FORM 1.4 **PAGE** **MONTH** **19__** **FARM RECEIPTS**

LINE	NON-BREEDING LIVESTOCK-RAISED						LIVESTOCK PURCHASED FOR RESALE					
	KIND: write in below						KIND: write in below					
			HEAD	Lbs.					HEAD	Lbs.		
	$	¢	▨	▨	$	¢	$	¢	▨	▨	$	¢
1												
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ASSIGNMENT SHEET #2

FORM 1.5 **PAGE** **MONTH** 19____ **FARM RECEIPTS**

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BREEDING LIVESTOCK									Machinery, Equipment, Building, Sales		Inflow From Loans		Non-farm Receipts		LINE
HEAD				KIND: write in below											
Qualify for Capital Gains						Lbs.									
Yes		No													
bot	rsd	bot	rsd	$	¢	▨	$	¢	$	¢	$	¢	$	¢	
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RECORD KEEPING
UNIT II

ASSIGNMENT SHEET #3 — COMPLETE POSTING OF FARM AND NONFARM EXPENDITURES

NAME ______________________ SCORE ____________

Posting of expenses should be completed on a regular basis. One idea is to post checks as they are received in the bank statement. When posting, be sure to include the date the check was written, total cost, and a detailed description of what was bought. The description should be complete enough to determine what was purchased and from whom it was purchased. Post the expense in the appropriate column(s). At the end of each month, total each column. The sum of the expense columns should equal the sum of the Total Cost column. These totals should be transferred to the cash flow summary form each month.

Using the following information, complete posting of farm and nonfarm expenditures for January, 19__. Total all columns.

(NOTE: Some of these transactions may also require entries on other forms, but these will be considered in other assignment sheets and units.)

- January 5 — (Check #415) Paid Keith Harp $335.88 for eighty hours farm labor at $4.50/hr. Withheld employee's contribution to FICA at 6.7 percent rate, or $24.12.
- January 7 — (Check #416) Paid $149 for welding repair to feed auger system in dairy barn to Jim's Welding Service.
- January 7 — Retained capital stock from patronage dividend check for $475.
- January 10 — Deductions from AMPI milk check for trucking and miscellaneous expenses totaling $480.
- January 11 — (Check #417) Paid Stone Feed for 20 tons of 16 percent dairy ration at $10.60/cwt and $1,060 for 10,000 pounds of dairy ration on accounts payable. Total check was $5,300.
- January 16 — Deductions from Oklahoma City stockyards livestock check for commissions, yardage, and feed totaling $39.75.
- January 17 — Deductions from AMPI milk check for trucking and miscellaneous expenses totaling $460.
- January 18 — (Check #418) Paid American Breeders Services $187.20 for semen.
- January 20 — (Check #419) McLoud Vet Clinic $317 for veterinary medicine and service.
- January 23 — (Check #420) Sharptons for 500 gallons pickup gas at $1.10 for a total of $550.

ASSIGNMENT SHEET #3

- January 24 — Deductions from AMPI milk check for trucking and miscellaneous expenses totaling $470.
- January 25 — (Check #421) Paid $227.12 to IRS for final FICA payment for last year.
- January 28 — Deductions from Oklahoma City stockyards livestock check for commission, yardage, and feed totaling $119.25.
- January 29 — Purchased new pickup from local dealer. Borrowed $7,000 from bank to pay on cash difference and wrote check #422 to dealer for $8,000 to complete the purchase.
- January 31 — PCA drafts

  #3 — Purchased supplies from Atwoods totaling $512.

  #4 — Keith Harp $335.88 for 80 hours farm labor at $4.50/hr. Withheld employee's FICA contribution of $24.12.

  #5 — Purchased four bred Holstein replacement heifers at $1,300 each from Joe Fisher. Trucking paid was $19.28 per head for a total draft of $5,277.12. The four heifers weighed 1,000 pounds each.
- January 31 — Deductions from wife's paycheck for withholding tax, FICA, and insurance totaled $475.
- January 31 — Bank service charge of $5.
- January 31 — Total sixteen checks for family living equaled $1,427.

ASSIGNMENT SHEET #3

FORM 2.1 **PAGE** **MONTH** **19____** **FARM EXPENDITURES**

LINE	DATE	TOTAL COST		DETAILED DESCRIPTION WHAT WAS BOUGHT, FROM WHOM	Check No.	HIRED LABOR		REPAIRS		INTEREST		FEED			SEEDS, PLANTS, OTHER		LINE
		$	¢			$	¢	$	¢	$	¢	Lbs.	$	¢	$	¢	
				subtotals brought from preceding page													
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				Subtotals to next page or to summary page													
						25		26		27			28		29		

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ASSIGNMENT SHEET #3

FORM 2.2 **PAGE** **MONTH** **19___** **FARM EXPENDITURES**

LINE	FERTILIZER, LIME, CHEMICAL		MACHINE HIRE		SUPPLIES		BREEDING FEES		MISCELLANEOUS EXPENSES	
	$	¢	$	¢	$	¢	$	¢	$	¢
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ASSIGNMENT SHEET #3

FORM 2.3 **PAGE** **MONTH** **19____** **FARM EXPENDITURES**

VET MEDICINE		FUEL AND OIL		STORAGE		TAXES		INSURANCE		UTILITIES		LINE
$	¢	$	¢	$	¢	$	¢	$	¢	$	¢	
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ASSIGNMENT SHEET #3

FORM 2.4 **PAGE** **MONTH** **19____** **FARM EXPENDITURES**

LINE	CASH RENT		FREIGHT, TRUCKING		CONSERVATION EXPENSES		NEW INVESTMENTS LIVESTOCK PURCHASED FOR RESALE KIND: Write in below					
									Head	Lbs.		
	$	¢	$	¢	$	¢	$	¢	▨	▨	$	¢
1												
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ASSIGNMENT SHEET #3

FORM 2.5 **PAGE** **MONTH** **19____** **FARM EXPENDITURES**

NEW INVESTMENTS										OUTFLOW FROM LOANS		NON-FARM EXPENDITURE, INVESTMENT		LINE
BREEDING STOCK						MACHINERY, EQUIPMENT PURCHASED		BUILDING, IMPROVEMENT						
KIND: Write in below														
		Head	Lbs.											
$	¢	▨	▨	$	¢	$	¢	$	¢	$	¢	$	¢	
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46		▨	▨	47		48		49		50		51		▨

RECORD KEEPING
UNIT II

ASSIGNMENT SHEET #4 — COMPLETE A CASH FLOW SUMMARY FORM

NAME ______________________________ SCORE ________________

The cash flow summary provides a month-by-month financial picture of the farming operation's cash inflows and outflows. The summary will also provide year-to-date totals and can be compared with the farm's cash flow projection and used for income tax reporting.

The cash flow summary is an excellent accuracy check for farm records if reconciled with the bank statement and checkbook.

The totals from the farm receipt and expenditures pages are forwarded to the cash flow summary. This should be completed at the end of each month. The cash difference for the month is calculated by subtracting the total dollars used from total dollars available. The cash balance at the beginning of each month should equal the cash balance at the end of the previous month.

Complete a cash flow summary form using the following information. Enter the date for February, and calculate the cash balance for the end of each month.

FEBRUARY

- *Cash receipts*

  Milk sales — $8,100
  Nonfarm receipts — $1,500

- *Cash expenditures*

  Hired labor — $671.76
  Repairs — $512
  Interest — $5,000
  Feed — $4,800
  Fertilizer — $2,700
  Supplies — $197
  Breeding fees — $210
  Miscellaneous expenses — $99.12
  Vet medicine — $297
  Fuel and oil — $635
  Insurance — $1,217
  Utilities — $562
  Principal paid — $2,800
  Nonfarm expenses — $2,514

- *Balance in checking account January 1, 19__* = (−$52.14)
- *Balance in checking account March 1, 19__* = $1,632.78

FORM 6.1 **CASH FLOW** **FINANCIAL PLAN OR SUMMARY**

	LINE	JAN.	FEB.	MAR.	APR.	MAY	JUNE	6-MONTH SUBTOTAL
RECEIPTS								
Crop Sales Wheat	1	5,950^{00}						
Alfalfa Hay	2	1,140^{00}						
	3							
	4							
Government Payments	5							
Custom Work	6							
Dividends, Refunds, Resales	7	855^{00}						
Cash Rent, Other	8							
Livestock Products (add columns 9-10)	10	7,755^{00}						
Misc. Income (add columns 11-12)	12							
Non-Breeding Livestock Raised (add cols. 13-14)	14	2,284^{00}						
OPERATING SALES TOTAL (add lines 1-14)	A	17,984^{00}						
Livestock Purchd. for Resale Sales Tot. (add cols. 15-16)	16	4,500^{00}						
Breeding Livestock Sales (add columns 17-18)	18	1,848^{00}						
Machinery, Equipment, Building Sales	19							
CAPITAL SALES TOTAL (add lines 18-19)	B	6,348^{00}						
TOTAL FARM RECEIPTS (add lines A plus 16 plus B)	C	24,332^{00}						
INFLOW FROM LOANS	20	13,125^{00}						
NON-FARM RECEIPTS	21	1,500^{00}						
TOTAL DOLLARS AVAILABLE (add lines C plus 20 plus 21)	D	38,957^{00}						
EXPENDITURES								
Hired Labor	25	671.76						
Repairs	26	149.00						
Interest	27							
Feed	28	4,240.00						
Seed, Plants, Other	29							

ASSIGNMENT SHEET #4

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Fertilizer, Lime, Chemicals	30							
Machine Hire	31							
Supplies	32	512.00						
Breeding Fees	33	187.20						
Miscellaneous Expenses	34	164.00						
Vet. Medicine	35	317.00						
Fuel and Oil	36	550.00						
Storage	37							
Taxes	38	227.12						
Insurance	39							
Utilities	40							
Cash Rent	41							
Freight, Trucking	42	1,477.12						
Conservation Expense	43							
OPERATING EXPEND. TOTAL (add lines 25-43)	E	8,495.20						
Livestock Purchd. for Resale Tot. (add cols. 44-45)	45							
Breeding Stock Purchases	46	5,200.00						
	47							
Machinery and Equipment Purchased	48	8,000.00						
Land and Building Improvement	49							
CAPITAL EXPENSES TOTAL (add lines 46-49)	F	13,200.00						
TOTAL FARM EXPENSES (add lines E plus 45 plus F)	G	21,695.20						
Outflow From Loans	50	1,060.00						
Non-Farm Expenses & Investments	51	1,902.00						
Family Living	FL							
TOTAL DOLLARS USED (add lines G thru FL)	H	24,657.20						
Cash Difference for Month (lines D minus H)	I							
Cash Balance Beginning of Month (line K last month)	J							
Cash Balance End of Month (add lines I + J)	K							
		JAN.	FEB.	MAR.	APR.	MAY	JUNE	6-MONTH SUBTOTAL

RECORD KEEPING
UNIT II

ASSIGNMENT SHEET #5 — COMPLETE AN ACCOUNTS RECEIVABLE FORM

NAME ____ SCORE ________________

Accounts receivable forms are an easy way to keep an accurate record of dollars other people owe you. There are two types of accounts receivable.

A. Open accounts receivable

EXAMPLE: Sale of hay to be paid within a year

B. Notes and mortgages receivable

EXAMPLE: Installment sale of land

Essential information needed to complete an accounts receivable form includes identifying the borrower, purpose, terms of each account, and amounts initially loaned or sold on credit or added to an existing contract.

PART I — Open Accounts Receivable

Use the following information to complete the Open Accounts Receivable form on the following page.

John Doe is buying alfalfa hay on credit. John plans to pay $1,000 on March 1, and the final unpaid balance on June 30. John will pay 12 percent interest on the remaining balance. On January 1, John owed $295.

John purchased additional hay on credit January 17 ($500); February 2 ($550); February 27 ($275); April 1 ($550); and April 15 ($275).

On March 1, John paid $981.10 principal and $18.90 interest; on June 30, he paid $1,463.90 principal and $48.94 interest.

(NOTE: If the cash method of accounting is used, record the amount of sale on form and add to Unpaid Principal Balance. No entry is required in the farm receipts section of the *Record Book* until payment is received. When payment is received, complete the Open Accounts Receivable form and record the payment and interest as though it were a cash sale in the Farm Receipts section.)

ASSIGNMENT SHEET #5

FORM 4.1 **PAGE** **OPEN ACCOUNTS RECEIVABLE**

BORROWER ____________________
PURPOSE ____________________
TERMS ____________________

DATE	ADDED TO ACCOUNT	PAYMENTS			UNPAID PRINCIPAL BALANCE
		TOTAL	INTEREST	PRINCIPAL	
	1	2	3	4	5

BORROWER ____________________
PURPOSE ____________________
TERMS ____________________

DATE	ADDED TO ACCOUNT	PAYMENTS			UNPAID PRINCIPAL BALANCE
		TOTAL	INTEREST	PRINCIPAL	
	1	2	3	4	5

ASSIGNMENT SHEET #5

PART II

Using the following information, complete the Notes and Mortgages Receivable form on the following page.

On March 1, 1981, James Sharpton purchased 10 acres for $20,000. James paid a 25 percent down payment and agreed to pay the remaining balance in five annual payments of $3,000 plus 10 percent interest on the unpaid balance due each March 1.

Interest and principal payments will be

March 1, 1982 — $1,500/$3,000
March 1, 1983 — $1,200/$3,000
March 1, 1984 — $900/$3,000
March 1, 1985 — $600/$3,000
March 1, 1986 — $300/$3,000

James paid principal and interest of $4,500 on February 27, 1982, and $4,200 on March 1, 1983. On February 15, 1984, James realized he needed to ask for a three-month extension. On June 1, 1984, James paid the third installment plus additional interest for a total of $4,107.69

(NOTE: If the cash method of accounting is used, record the additions in the Added to Account column and Unpaid Principal Balance column. Other entries are not required until payment is made. Record payments on form and in the appropriate columns in the Farm Receipts section of the *Record Book*.)

ASSIGNMENT SHEET #5

FORM 4.2 **PAGE** **NOTES AND MORTGAGES RECEIVABLE**

BORROWER ____________________

PURPOSE ____________________

TERMS ____________________

DATE	ADDED TO ACCOUNT	REPAYMENT SCHEDULE				PAYMENTS RECEIVED				UNPAID PRINCIPAL BALANCE
		DATE	PAYMENT	INTEREST	PRINCIPAL	DATE	TOTAL	INTEREST	PRINCIPAL	
		—	—	—	—	—	—	—	—	
	1		2	3	4		5	6	7	8

RECORD KEEPING
UNIT II

ASSIGNMENT SHEET #6 — COMPLETE ACCOUNTS PAYABLE AND CREDIT RECORDS

NAME ______________________________ SCORE ______________

Several different forms may be used to accurately keep track of the amount of money owed. Types of accounts payable and credit records include the following:

A. Open accounts payable,

EXAMPLES: Feed bill, co-op account

B. Short-term single-payment note,

EXAMPLE: Six-month cattle note

C. Credit lines and short-term multipayment notes,

EXAMPLES: Production Credit Association operating note; bank line of credit

D. Intermediate multipayment note, and

EXAMPLE: Machinery and equipment note

E. Long-term multipayment mortgage record.

EXAMPLE: Land note

Information needed to complete an accounts payable or credit record form includes identifying the creditor, the purpose of the loan, the terms of the loan, the amount initially borrowed (or the January 1 unpaid balance), the amounts added to accounts, and the payments.

PART I — Accounts Payable

Use the following information to complete the Open Accounts Payable form on the next page.

You have a 90-day open account at Sim's Farm Supply for purchase of parts. The unpaid principal balance on January 1 is $0.00. The following parts and supplies were purchased on credit during January, February, and March.

January 10 — $52.12
January 21— $8.09
February 7 — $14.72
February 18 — $.87
February 25 — $397.45
March 8 — $37.08
March 21 — $47.49
March 22 — $9.14

ASSIGNMENT SHEET #6

(NOTE: Copies of sales receipts were kept on file on all credit purchases.)

On April 2, you wrote check #452 to Sim's Farm Supply for $566.96 to pay the account in full.

(NOTE: If the cash method of accounting is used, record additions to account on form and add to unpaid principal balance. Other entries are not needed until payment is made. Record payments on form and transfer to appropriate columns in Farm Receipts section as though a cash purchase were made.)

ASSIGNMENT SHEET #6

FORM 4.3 **PAGE** **OPEN ACCOUNTS PAYABLE**

CREDITOR ____________________
PURPOSE ____________________
TERMS ____________________

DATE	ADDED TO ACCOUNT	PAYMENTS			UNPAID PRINCIPAL BALANCE
		TOTAL	INTEREST	PRINCIPAL	
	1	2	3	4	5

CREDITOR ____________________
PURPOSE ____________________
TERMS ____________________

DATE	ADDED TO ACCOUNT	PAYMENTS			UNPAID PRINCIPAL BALANCE
		TOTAL	INTEREST	PRINCIPAL	
	1	2	3	4	5

ASSIGNMENT SHEET #6

PART II — Short-Term Single-Payment Note Record

Use the following information to complete a Short-Term Single-Payment Note Record form on the next page.

On March 15, you borrowed $32,000 from the First National Bank to purchase stocker cattle. Terms included a 15 percent interest rate, and the note was due July 15. On July 14, you sold your stocker calves and paid the bank $33,600, which included $32,000 principal due and $1,600 interest.

On June 15, you borrowed $36,000 from First National Bank to pay custom harvest expenses for harvesting 2,000 acres of wheat. Terms included a 14.5 percent interest rate and a maturity date of August 1. You have not paid the loan at this time.

(NOTE: Several notes can be recorded on one page of the form. Record the gross amount borrowed. Record the net amount borrowed if loan is discontinued or stock is required. Record the amount borrowed in the appropriate column in the Farm Receipts section. Record loan payments and transfer to appropriate columns in Farm Expenditure section.)

ASSIGNMENT SHEET #6

FORM 4.4 **PAGE**

SHORT TERM SINGLE PAYMENT NOTE RECORD

DATE	LENDER AND PURPOSE	BORROWINGS				REPAYMENT			
		GROSS	NET FORM 1.5 COL. 20	INT. RATE	MATURITY DATE	TOTAL FORM 2.1	INTEREST FORM 2.1 COL. 27	PRINCIPAL FORM 2.5 COL. 50	DATE
	1	2	3	4	5	6	7	8	

ASSIGNMENT SHEET #6

PART III — Credit Lines and Short-Term Multipayment Notes

Use the following information to complete the Credit Lines and Short-Term Multipayment Notes form on the following page.

You have an operating loan with your local Production Credit Association. Terms of the operating loan include variable interest rate, payments when commodities are sold, sight drafts, and an annual payment date of April 1 when principal and interest must be paid. On January 1, the unpaid principal balance was $25,000 and accrued interest totaled $1,597.50.

Transactions include

Additional borrowings (sight drafts for expenses)
January 15 — $512
February 27 — $2,439
March 30 — $4,212

Payments (sales of commodities)
February 1 — $2,500
March 15 — $950

On April 1, a new note for $31,106.75 was negotiated. A payment of $31,106.75 was paid on the previous note ($28,713 principal and $2,393.75 interest).

(NOTE: Borrowings and advances on credit lines should be added to unpaid principal balance and transferred to the appropriate column in Farm Receipts section. Loan payments should be recorded in appropriate columns and transferred to the Farm Expenditures section.)

ASSIGNMENT SHEET #6

FORM 4.5 **PAGE**

CREDIT LINES AND SHORT TERM MULTIPAYMENT NOTES

CREDITOR ____________________

PURPOSE ____________________

TERMS ____________________

DATE	ADDITIONAL BORROWINGS FORM 1.5 COL. 20	PAYMENTS			UNPAID PRINCIPAL BALANCE
		TOTAL FORM 2.1	INTEREST FORM 2.1 COL. 27	PRINCIPAL FORM 2.5 COL. 50	
	1	2	3	4	5

CREDITOR ____________________

PURPOSE ____________________

TERMS ____________________

DATE	ADDITIONAL BORROWINGS FORM 1.5 COL. 20	PAYMENTS			UNPAID PRINCIPAL BALANCE
		TOTAL FORM 2.1	INTEREST FORM 2.1 COL. 27	PRINCIPAL FORM 2.5 COL. 50	
	1	2	3	4	5

ASSIGNMENT SHEET #6

PART IV — Intermediate and Long-Term Multipayment Note and Mortgage Records

Use the following information to complete the Intermediate Multipayment Note and Mortgage Record form on the next page.

On July 12, 1983, you purchased a new combine for $70,000 plus your old combine as a trade-in. The implement dealer agreed to finance the $70,000 over a five-year period at 14 percent interest, with constant payments of $20,384 due July 12 each year.

Interest and principal payments will be

July 12, 1984 — $9,800/$10,584
July 12, 1985 — $8,318.25/$12,065.75
July 12, 1986 — $6,629/$13,755
July 12, 1987 — $4,703.35/$15,680.65
July 12, 1988 — $2,469.40/$17,914.60

Repayment has included

July 11, 1984 — $20,384
July 10, 1985 — $20,384

(NOTE: Record payment schedule. When money is borrowed, record on form and in appropriate columns in Farm Receipt section. When loan payments are made, record information on form, and transfer to appropriate columns in Farm Expenditures section.)

ASSIGNMENT SHEET #6

FORM 4.6 **PAGE** **INTERMEDIATE AND LONG TERM MULTIPAYMENT NOTE AND MORTGAGE RECORD**

CREDITOR ____

PURPOSE ____

TERMS ____

REPAYMENT SCHEDULE				REPAYMENT RECORD				
DATE	TOTAL	INTEREST	PRINCIPAL	DATE	TOTAL FORM 2.1	INTEREST FORM 2.1 COL. 27	PRINCIPAL FORM 2.5 COL. 50	UNPAID PRINCIPAL BALANCE
	1	2	3		4	5	6	7

RECORD KEEPING
UNIT II

ASSIGNMENT SHEET #7 — COMPLETE A HIRED LABOR RECORD FORM

NAME ______________________________ SCORE ________________

An individual record should be kept on each individual employed in the farm business. Hired labor records are needed to complete IRS Form 943—Employer's Annual Tax Return for Agricultural Employees (due by January 31 each year), which reports income and Social Security taxes withheld from employees' wages.

As a former employer, you may have to withhold and pay an employer's share of Social Security (FICA) taxes if certain tests are met. You may also be required to pay federal unemployment (FUTA) taxes and withhold income tax.

(NOTE: For more information, consult current editions of the following IRS publications: Publication 225—*Farmer's Tax Guide*, Circular A—*Agricultural Employer's Tax Guide*, Circular E—*Employer's Tax Guide*.)

Information needed for completing a hired labor record form include employee's name, Social Security number, mailing address, the date the check was written, total hours worked, enterprise charged for labor, total wages, deductions or withholdings, and net wages. The net wage is the amount the employee will be paid.

Use the following information to complete the Hired Labor Record form on the next page.

Employee — Keith Harp
Social Security number — 000-00-0000
Mailing address — Route 1, Stillwater, OK 74074

Wages Paid

- January 5 — Check #415 for $335.88 for eighty hours labor in dairy enterprise at $4.50/hr. Withheld Social Security contribution at 6.7 percent rate, or $24.12.
- January 31 — PCA draft #4 for $335.88 for eighty hours labor in dairy enterprise at $4.50/hr. Withheld Social Security contribution of $24.12.
- February 28 — Check #456 for $671.76 for 160 hours labor in dairy enterprise at $4.50/hr. Withheld FICA contribution of $48.24.
- March 30 — Check #498 for $1,049.62 for 250 hours labor (160 hours in dairy enterprise; 90 hours in wheat enterprise) at $4.50/hr. Withheld Social Security contribution of $75.38.
- April 30 — Check #557 for $1,343.52 for 320 hours labor (160 hours in dairy enterprise, 80 in stocker enterprise, and 80 hours in peanut enterprise) at $4.50/hr. Withheld Social Security contribution of $96.48.

ASSIGNMENT SHEET #7

FORM 4.7 **PAGE** 19____ **HIRED LABOR RECORD**

Employee's Name
Social Security No.
Address

DATE	HRS TIME WRKD	ENT. REF. CODE	TOTAL WAGES	DEDUCTIONS - reference only				NET PAID FORM 2.1 COL. 25
				FEDERAL W.H.	STATE W.H.	F.I.C.A.	OTHER	
TOTAL		▨						

Employee's Name
Social Security No.
Address

DATE	HRS TIME WRKD	ENT. REF. CODE	TOTAL WAGES	DEDUCTIONS - reference only				NET PAID FORM 2.1 COL. 25
				FEDERAL W.H.	STATE W.H.	F.I.C.A.	OTHER	
TOTAL		▨						

RECORD KEEPING
UNIT II

ASSIGNMENT SHEET #8 — COMPLETE POSTING OF FAMILY-LIVING RECORDS

NAME ____ SCORE ________________

Families frequently want to keep track of their expenses for family-living. The family-living and nonfarm forms provide a place to record family and nonfarm income and expenses. The forms have columns to separate items that are deductible for income tax reporting if deductions are itemized.

Procedures for completing the family living and nonfarm income and expense forms include

A. Post date, total amount of check, and a description of the check for family-living expenses from Farm Expenditure pages.

B. Post total cost to appropriate column.

C. Record number of miles driven for medical purposes or for charity in Medical Mileage column.

D. Post nonfarm income from Farm Receipts page.

E. Post nonfarm business expenses from Farm Expenditure pages.

F. Make sure that sums of Family-Living Expense columns equal sum of Total Cost column.

G. Use first set of forms as a summary page. Use line 1 for January, line 2 for February, and so on.

PART I

Use the following information to complete posting of March family records on the forms provided on the following pages.

March 1 — (Check #1440) Oklahoma FFA Alumni, life membership—$125

March 2 — (Check #1441) Stillwater FFA Booster Club, tickets to calf fry—$30

March 2 — (Check #1442) Paul Magruder, picture frames—$10

March 2 — (Check #1443) Wal-Mart, household—$59.82

March 2 — (Check #1444) Southwestern Bell Telephone, home share (50%)—$15.14

March 2 — (Check #1445) Koloud Tarapolsi, daily newspaper—$4

March 5 — (Check #1446) IGA, groceries—$91.08

ASSIGNMENT SHEET #8

March 12 — (Check #1447) OG&E, utilities—$212

March 12 — (Check #1448) Master Charge, clothing $72; car gas $112—$184

March 12 — (Check #1449) Stillwater Schools, kids' lunches—$62

March 13 — (Check #1450) Bestyet, groceries—$79.12

March 13 — (Check #1451) IGA, groceries—$65.97

March 15 — (Check #1452) Life insurance—$92.15

March 15 — (Check #1453) Quick Trip, car gas $17; snacks $3.25; cash $9.75—$30

March 21 — (Check #1454) IGA, groceries—$102.17

March 22 — (Check #1455) Richard's Furniture, bedroom suite—$1,150.12

March 28 — (Check #1456) Terry Miller, DDS—$28

March 30 — Deductions, wife's check—$475

($132.33 Social Security, $220 withheld Federal Income Tax, $56.50 withheld state tax; and $66.17 medical insurance)

March 30 — Wife's salary—$1,500

March 30 — El Paso Oil, lease bonus 10 ac.—$800

March 30 — Grandma reimbursed wife for purchase in Feb.—$25

March 30 — Total nonfarm receipts transferred—$2,325

March 30 — Total nonfarm expenditures transferred—$2,815.57

ASSIGNMENT SHEET #8

FORM 5.1 **PAGE** **MONTH** **19____** **FAMILY LIVING AND PERSONAL EXPENDITURES**

LINE	DATE	TOTAL COST $ ¢	DESCRIPTION	FOOD $ ¢	CLOTHING $ ¢	HOUSE HOLD OPER'NG $ ¢	TELEPHONE $ ¢	HEATING FUEL $ ¢	HOUSEHOLD FURN'G $ ¢	UTILITIES $ ¢	ENTERTAINMENT RE-CREATION GIFTS $ ¢	HOUSE REPAIRS IMPV'MTS RENT $ ¢	EDUC. AND READING $ ¢	PERSON'L ITEMS $ ¢	LINE
			[illegible]												
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ASSIGNMENT SHEET #8

FORM 5.2 **PAGE** **MONTH** **19____**

NON FARM RECEIPTS AND EXPENDITURES

LINE	PERSONAL CAR AND TRAVEL EXPENSE		INSURANCE LIFE NON-MED. NON-FARM		INSURANCE HEALTH AND ACCIDENT		MEDICAL EXPENSES doctor, hospital ambulance, glasses		PERSCRIPT. DRUGS, MEDICINES		MEDICAL MILEAGE	TAX DEDUCT. CONTRIBUTIONS		INCOME TAX, SOC. SEC., SAVINGS, INVEST.		NON-FARM INTEREST PAYMENTS		NON-FARM PRINCIPAL PAYMENTS & TRANSF. TO FARM ACCOUNTS		DATE	DESCRIPTION	NON-TXBL RECEIPTS transfers inherit. refunds		TAXABLE RECEIPTS wages, stock div., interest		RELATED DEDUCT. EXPEND.		LINE
	$	¢	$	¢	$	¢	$	¢	$	¢		$	¢	$	¢	$	¢	$	¢			$	¢	$	¢	$	¢	
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2																												2
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ASSIGNMENT SHEET #8

PART II

Use the forms provided on the following pages to post a summary of the month completed in PART I.

ASSIGNMENT SHEET #8

FORM 5.1 **PAGE** **MONTH** **19____** **FAMILY LIVING AND PERSONAL EXPENDITURES**

LINE	DATE	TOTAL COST		DESCRIPTION	FOOD		CLOTHING		HOUSE HOLD OPER'NG		TELEPHONE		HEATING FUEL		HOUSEHOLD FURN'G		UTILITIES		ENTERTAINMENT RECREATION GIFTS		HOUSE REPAIRS IMPV'MTS RENT		EDUC. AND READING		PERSON'L ITEMS		LINE
		$	¢		$	¢	$	¢	$	¢	$	¢	$	¢	$	¢	$	¢	$	¢	$	¢	$	¢	$	¢	
				[illegible]																							
1		1982	00	January	375	00			49	12	10	00					200	88	391	00			15	00	45	00	1
2		2514	00	February	327	00	210	00	78	92	10	00					225	08	344	00	517	68	15	32			2
3				March																							3
4				April																							4
5				May																							5
6				June																							6
7				July																							7
8				August																							8
9				September																							9
10				October																							10
11				November																							11
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ASSIGNMENT SHEET #8

FORM 5.2 **PAGE** **MONTH** **19____**

NON FARM RECEIPTS AND EXPENDITURES

LINE	PERSONAL CAR AND TRAVEL EXPENSE		INSURANCE LIFE NON-MED. NON-FARM		INSURANCE HEALTH AND ACCIDENT		MEDICAL EXPENSES doctor, hospital ambulance, glasses		PERSCRIPT DRUGS, MEDICINES		MEDICAL MILEAGE	TAX DEDUCT. CONTRIBUTIONS		INCOME TAX, SOC SEC., SAVINGS, INVEST		NON-FARM INTEREST PAYMENTS		NON-FARM PRINCIPAL PAYMENTS & TRANSF TO FARM ACCOUNTS		DATE	DESCRIPTION	NON-TXBL RECEIPTS transfers inherit. refunds		TAXABLE RECEIPTS wages, stock div., interest		RELATED DEDUCT. EXPEND.		LINE
	$	¢	$	¢	$	¢	$	¢	$	¢		$	¢	$	¢	$	¢	$	¢			$	¢	$	¢	$	¢	
1	198	68	92	15	66	17	20	00	30	17				408	83						NON-FARM INCOME			1500	00			1
2	168	85	92	15	66	17	50	00						408	83						NON-FARM INCOME			1500	00			2
3																												3
4																												4
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RECORD KEEPING
UNIT II

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1 — Evaluated to the satisfaction of the instructor

Assignment Sheet #2 — See following pages

Assignment Sheet #3 — See following pages

Assignment Sheet #4 — See following pages

Assignment Sheet #5 — See following pages

Assignment Sheet #6 — See following pages

Assignment Sheet #7 — See following pages

Assignment Sheet #8 — See following pages

Assignment Sheet #2

ANSWERS TO ASSIGNMENT SHEETS

FORM 1.1 **PAGE** 1 of 1 **MONTH** January **19**___ **FARM RECEIPTS**

LINE	Date	TOTAL RECEIPTS $	¢	DETAILED DESCRIPTION to whom, what, etc.	AMOUNT: Pounds, Bushels, Tons, etc.	CROP SALES KIND: write in below Wheat $	¢	Alfalfa Hay $	¢	$	¢	$	¢	LINE
				subtotals brought from preceeding page										
1	5	5950	00	Elevator @ 3.50/bu	1700 bu	5950	00							1
2	7	855	00	Local co-op - patronage refund										2
3	10	2640	00	AMPI - Milk Sales @ 11.00										3
4	16	796	50	OKC Stockyards @ 59.50 Hereford heifers										4
5	17	2530	00	AMPI - Milk Sales @ 11.00										5
6	20	4500	00	John Doe - Holstein springer heifers										6
7	24	2585	00	AMPI - Milk Sales @ 11.00										7
8	25	1140	00	John Doe - Alf Hay @ 95.00	12 tons			1140	00					8
9	28	3335	50	OKC Stockyards cows @ 33.50, heifers @ 59.50										9
10	21	7000	00	Bank Loan on Pickup										10
11	31	1500	00	Wife's wages - school										11
12	31	6125	00	Three PCA drafts										12
13														13
14														14
15														15
16														16
17														17
18														18
19														19
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21														21
22														22
23														23
		38957	00	Totals for January subtotals to next page or totals to summary page		5950	00	1140	00					
						1		2		3		4		

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #2

FORM 1.2 **PAGE** **MONTH** January **19**___ **FARM RECEIPTS**

LINE	MISCELLANEOUS FARM RECEIPTS							
	Government Payments		Custom Work		Patron Dividends, Refunds, Resales		Cash Rent, Other	
	$	¢	$	¢	$	¢	$	¢
1								
2					855.	00		
3								
4								
5								
6								
7								
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					855.	00		
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ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #2

FORM 1.3 **PAGE** **MONTH** Jan 19____ **FARM RECEIPTS**

LINE	LIVESTOCK PRODUCTS					MISCELLANEOUS INCOME			
	LBS/ DOZ	KIND: write in below				KIND: write in below			
		Milk							
	Quantity	$	¢	$	¢	$	¢	$	¢
1									
2									
3	24000	2640	00						
4									
5	23000	2530	00						
6									
7	23500	2585	00						
8									
9									
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22									
23									
	70500 lbs	7755	00						
		9		10		11		12	

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ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #2

FORM 1.4 **PAGE** **MONTH** January 19____ **FARM RECEIPTS**

LINE	NON-BREEDING LIVESTOCK--RAISED						LIVESTOCK PURCHASED FOR RESALE					
	KIND: write in below						KIND: write in below					
	Beef		HEAD	Lbs.					HEAD	Lbs.	Dairy	
	$	¢	▨	▨	$	¢	$	¢	▨	▨	$	¢
1												
2												
3												
4	796	50	3	1350								
5												
6									5	5250	4500	00
7												
8												
9	1487	50	5	2500								
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	2284	00	8	3850					5	5250	4500	00
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ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #2

FORM 1.5 PAGE MONTH January **19____ FARM RECEIPTS**

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BREEDING LIVESTOCK									Machinery, Equipment, Building, Sales		Inflow From Loans		Non-farm Receipts		LINE
HEAD				KIND: write in below											
Qualify for Capital Gains						Lbs.	Dairy								
Yes		No													
bot	rsd	bot	rsd	$	¢	▨	$	¢	$	¢	$	¢	$	¢	
															1
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															6
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															8
	4					5600	1848	00							9
											7000	00			10
													1500	00	11
											6125	00			12
															13
															14
															15
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															21
															22
															23
	4					5600	1848	00			13125	00	1500	00	
▨	▨	▨	▨	17		▨	18		19		20		21		

Assignment Sheet #3

ANSWERS TO ASSIGNMENT SHEETS

FORM 2.1 PAGE MONTH January 19 **FARM EXPENDITURES**

LINE	DATE	TOTAL COST		DETAILED DESCRIPTION WHAT WAS BOUGHT, FROM WHOM	Check No.	HIRED LABOR		REPAIRS		INTEREST		FEED			SEEDS, PLANTS, OTHER		LINE
		$	¢			$	¢	$	¢	$	¢	Lbs.	$	¢	$	¢	
				subtotals brought from preceeding page													
1	5	335	88	Keith Harp - 80 hrs	415	335	88										1
2	7	149	00	Jim's Welding Service	416			149	00								2
3	7	475	00	Retained Capital Stock	—												3
4	10	480	00	AMPI - deductions	—												4
5	11	5300	00	Stone Feed	417							8000#	4240	00			5
6	16	39	75	OKC Stockyard Deductions	—												6
7	18	187	20	ABS - Semen	418												7
8	20	317	00	McCloud Vet Clinic	419												8
9	23	550	00	300 gal. Pickup Sharpton's - GAS	420												9
10	17	460	00	AMPI deductions	—												10
11	24	470	00	AMPI deductions	—												11
12	25	227	12	IRS - 19 - FICA	421												12
13	28	119	25	OKC Stockyard deductions	—												13
14	29	8000	00	New Pickup	422												14
15	31	512	00	Atwood - Supplies	PCA 3												15
16	31	335	88	Keith Harp - 80 hrs	PCA 4	335	88										16
17	31	5277	12	Joe Fischer - heifers	PCA 5												17
18	31	475	00	Deduction from wife's salary	—												18
19	31	5	00	Bank Service Charge	—												19
20	31	1427	00	16 family Living CKS	—												20
21																	21
22																	22
23																	23
		25,142	20	Subtotals to next page or to summary page		671	76	149	00				4840	00			
						25		26		27			28		29		

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #3

FORM 2.2 PAGE MONTH 19____ FARM EXPENDITURES

LINE	FERTILIZER, LIME, CHEMICAL		MACHINE HIRE		SUPPLIES		BREEDING FEES		MISCELLANEOUS EXPENSES	
	$	¢	$	¢	$	¢	$	¢	$	¢
1										
2										
3										
4										
5										
6									39	75
7							187	20		
8										
9										
10										
11										
12										
13									119	25
14										
15					512	00				
16										
17										
18										
19									5	00
20										
21										
22										
23										
					512	00	187	20	164	00
▨	30		31		32		33		34	

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ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #3

FORM 2.3 **PAGE** **MONTH** **19____** **FARM EXPENDITURES**

Cut Here

VET MEDICINE		FUEL AND OIL		STORAGE		TAXES		INSURANCE		UTILITIES		LINE
$	¢	$	¢	$	¢	$	¢	$	¢	$	¢	
												1
												2
												3
												4
												5
												6
												7
317	00											8
		550	00									9
												10
												11
						227	12					12
												13
												14
												15
												16
												17
												18
												19
												20
												21
												22
												23
317	00	550	00			227	12					
35		36		37		38		39		40		

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #3

FORM 2.4 PAGE MONTH 19____ FARM EXPENDITURES

LINE	CASH RENT		FREIGHT, TRUCKING		CONSERVATION EXPENSES		NEW INVESTMENTS LIVESTOCK PURCHASED FOR RESALE KIND: Write in below					
	$	¢	$	¢	$	¢	$	¢	Head	Lbs.	$	¢
1												
2												
3												
4			480	00								
5												
6												
7												
8												
9												
10			460	00								
11			470	00								
12												
13												
14												
15												
16												
17			77	12								
18												
19												
20												
21												
22												
23												
			1487	12								
▨	41		42		43		44		▨	▨	45	

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ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #3

FORM 2.5 **PAGE** **MONTH** **19____** **FARM EXPENDITURES**

Cut Here

NEW INVESTMENTS										OUTFLOW FROM LOANS		NON-FARM EXPENDITURE, INVESTMENT		LINE
BREEDING STOCK						MACHINERY, EQUIPMENT PURCHASED		BUILDING, IMPROVEMENT						
KIND: Write in below														
DAIRY		Head	Lbs.											
$	¢	▨	▨	$	¢	$	¢	$	¢	$	¢	$	¢	
														1
														2
										475	00			3
														4
										1060	00			5
														6
														7
														8
														9
														10
														11
														12
														13
						8000	00							14
														15
														16
5200	00	4	4000											17
												475	00	18
														19
												1427	00	20
														21
														22
														23
5200	00	4	4000			8000	00			1535	00	1902	00	
46		▨	▨	47		48		49		50		51		▨

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #4

FORM 6.1 CASH FLOW **FINANCIAL PLAN OR SUMMARY**

	LINE	JAN	FEB	MAR	APR	MAY	JUNE	6-MONTH SUBTOTAL
RECEIPTS								
Crop Sales Wheat	1	5950^{00}						
Alfalfa Hay	2	1140^{00}						
	3							
	4							
Government Payments	5							
Custom Work	6							
Dividends, Refunds, Resales	7	855.^{00}						
Cash Rent, Other	8							
Livestock Products (add columns 9-10)	10	7755^{00}	8100^{00}					
Misc. Income (add columns 11-12)	12							
Non-Breeding Livestock Raised (add cols. 13-14)	14	2284^{00}						
OPERATING SALES TOTAL (add lines 1-14)	A	17984^{00}	8100^{00}					
Livestock Purchd. for Resale Sales Tot (add cols 15-16)	16	4500^{00}						
Breeding Livestock Sales (add columns 17-18)	18	1848^{00}						
Machinery, Equipment, Building Sales	19							
CAPITAL SALES TOTAL (add lines 18-19)	B	6348.^{00}	-0-					
TOTAL FARM RECEIPTS (add lines A plus 16 plus B)	C	24332^{00}	8100^{00}					
INFLOW FROM LOANS	20	13125^{00}						
NON-FARM RECEIPTS	21	1500^{00}	1500^{00}					
TOTAL DOLLARS AVAILABLE (add lines C plus 20 plus 21)	D	38957^{00}	9600^{00}					
EXPENDITURES								
Hired Labor	25	671.76	671.76					
Repairs	26	149^{00}	512^{00}					
Interest	27		5000.^{00}					
Feed	28	4240^{00}	4800^{00}					
Seed, Plants, Other	29							
Fertilizer, Lime, Chemicals	30		2700^{00}					
Machine Hire	31							
Supplies	32	512.^{00}	197.^{00}					
Breeding Fees	33	187.^{20}	210.^{00}					
Miscellaneous Expenses	34	164.^{00}	99.^{12}					
Vet. Medicine	35	317.^{00}	297.^{00}					
Fuel and Oil	36	550.^{00}	635.^{00}					
Storage	37							
Taxes	38	227.^{18}						
Insurance	39		1217.^{00}					
Utilities	40		562^{00}					
Cash Rent	41							
Freight, Trucking	42	1477.^{12}						
Conservation Expense	43							
OPERATING EXPEND. TOTAL (add lines 25-43)	E	8495.^{20}	16900^{88}					
Livestock Purchd. for Resale Tot (add cols 44-45)	45							
Breeding Stock Purchases	46	5200^{00}						
	47							
Machinery and Equipment Purchased	48	8000^{00}						
Land and Building Improvement	49							
CAPITAL EXPENSES TOTAL (add lines 46-49)	F	13200.^{00}	-0-					
TOTAL FARM EXPENSES (add lines E plus 45 plus F)	G	21695^{20}	16900^{88}					
Outflow From Loans	50	1060^{00}	2800.^{00}					
Non-Farm Expenses & Investments	51	1902^{00}	2514.^{00}					
Family Living	FL							
TOTAL DOLLARS USED (add lines G thru FL)	H	24657^{20}	22214^{88}					
Cash Difference for Month (lines D minus H)	I	14299^{80}	<12614^{88}>					
Cash Balance Beginning of Month (line K last month)	J	<52.^{14}>	14247^{66}	1632^{78}				
Cash Balance End of Month (add lines I + J)	K	14247^{66}	1632^{78}					
		JAN	FEB	MAR	APR	MAY	JUNE	6-MONTH SUBTOTAL

BEST COPY AVAILABLE

FORM 4.1 **PAGE** **OPEN ACCOUNTS RECEIVABLE**

BORROWER John Doe
PURPOSE Purchase Alfalfa Hay
TERMS Pay $1000 on Mar. 1 and balance June 1 @12% interest

DATE	ADDED TO ACCOUNT	PAYMENTS TOTAL	PAYMENTS INTEREST	PAYMENTS PRINCIPAL	UNPAID PRINCIPAL BALANCE
1/1	Beginning balance				295.00
1/17	500.00				795.00
2/2	550.00				1345.00
2/27	275.00				1620.00
3/1		1,000.00	18.90	981.10	638.90
4/1	550.00				1188.90
4/15	275.00				1463.90
6/30		1512.84	48.94	1463.90	-0-
	1	2	3	4	5

Note: interest calculated as follows:
295 x .12/12 = 2.95
500 x .12/12/2 = 2.50
1345 x .12/12 = 13.45
18.90
638.90 x 12/12 = 6.39
1188.90 x .12x3/12 = 35.67
275 x .12x2.5/12 = 6.88
48.94

The $1,000.00 received on March 1 should have been recorded in farm receipts as $981.10 cash sale of alfalfa hay and $18.90 interest received.
The $1512.84 received on June 30 should have been recorded in farm receipts as $1463.90 cash sale of alfalfa hay and $48.94 interest received.

BORROWER
PURPOSE
TERMS

DATE	ADDED TO ACCOUNT	PAYMENTS TOTAL	PAYMENTS INTEREST	PAYMENTS PRINCIPAL	UNPAID PRINCIPAL BALANCE
	1	2	3	4	5

FORM 4.2 **PAGE** **NOTES AND MORTGAGES RECEIVABLE**

BORROWER James Sharpton

PURPOSE 10 acres @ 2,000.00

TERMS 25% down payment, 5 annual payments of $3000.00 plus 10% interest on unpaid balance

DATE	ADDED TO ACCOUNT	REPAYMENT SCHEDULE				PAYMENTS RECEIVED				UNPAID PRINCIPAL BALANCE
		DATE	PAYMENT	INTEREST	PRINCIPAL	DATE	TOTAL	INTEREST	PRINCIPAL	
3-1-81		—	—	—	—	—	—	—	—	15,000.00
		3-1-82	4,500.00	1,500.00	3000.00	2-27-82	4500.00	1,500.00	3,000.00	12,000.00
		3-1-83	4200.00	1200.00	3000.00	3-1-83	4200.00	1200.00	3000.00	9,000.00
		3-1-84	3900.00	900.00	3000.00	6-1-84	4,107.69	1107.69	3000.00	6,000.00
		3-1-85	3600.00	600.00	3,000.00					
		3-1-86	3,300.00	300.00	3000.00					
	1		2	3	4		5	6	7	8

Assignment Sheet #6, Part I

ANSWERS TO ASSIGNMENT SHEETS

FORM 4.3 **PAGE**

OPEN ACCOUNTS PAYABLE

CREDITOR Sims Farm Supply
PURPOSE Parts
TERMS 90 day open account

DATE	ADDED TO ACCOUNT	PAYMENTS			UNPAID PRINCIPAL BALANCE
		TOTAL	INTEREST	PRINCIPAL	
1/1	—	—	—	—	-0-
1/10	52.12				52.12
1/21	8.09				60.21
2/7	14.72				74.93
2/18	.87				75.80
2/25	397.45				473.25
3/8	37.08				510.33
3/21	47.49				557.82
3/22	9.14				566.96
7/2		566.96		566.96	-0-
	1	2	3	4	5

CREDITOR
PURPOSE
TERMS

DATE	ADDED TO ACCOUNT	PAYMENTS			UNPAID PRINCIPAL BALANCE
		TOTAL	INTEREST	PRINCIPAL	
	1	2	3	4	5

Assignment Sheet #6, Part II

ANSWERS TO ASSIGNMENT SHEETS

FORM 4.4 **PAGE**

SHORT TERM SINGLE PAYMENT NOTE RECORD

		BORROWINGS				REPAYMENT			
DATE	LENDER AND PURPOSE	GROSS	NET FORM 1.5 COL. 20	INT. RATE	MATURITY DATE	TOTAL FORM 2.1	INTEREST FORM 2.1 COL. 27	PRINCIPAL FORM 2.5 COL. 50	DATE
3/15	1st National-Stocker	32,000.00	32,000.00	15.0	7/15	33,600.00	1,600.00	32,000.00	7/14
6/15	1st National-Wheat Harvest	36,000.00	36,000.00	14.5	8/1				
	1	2	3	4	5	6	7	8	

Assignment Sheet #6, Part III

ANSWERS TO ASSIGNMENT SHEETS

FORM 4.5 **PAGE**

CREDIT LINES AND SHORT TERM MULTIPAYMENT NOTES

CREDITOR Production Credit Assn.
PURPOSE Operating Loan
TERMS Payment in full annually - Variable Interest

DATE	ADDITIONAL BORROWINGS FORM 1.5 COL.20	PAYMENTS			UNPAID PRINCIPAL BALANCE
		TOTAL FORM 2.1	INTEREST FORM 2.1 COL. 27	PRINCIPAL FORM 2.5 COL. 50	
1/1	——	——	——	——	25000.00
1/15	512.00				25,512.00
2/1		2,500.00		2,500.00	23,012.00
2/27	2439.00				25,451.00
3/15		950.00		950.00	24,501.00
3/30	4,212.00				28,713.00
4/1		31,106.75	2,393.75	28,713.00	—0—
4/1	31,106.75	New note			31,106.75
	1	2	3	4	5

CREDITOR
PURPOSE
TERMS

DATE	ADDITIONAL BORROWINGS FORM 1.5 COL. 20	PAYMENTS			UNPAID PRINCIPAL BALANCE
		TOTAL FORM 2.1	INTEREST FORM 2.1 COL. 27	PRINCIPAL FORM 2.5 COL. 50	
	1	2	3	4	5

Assignment Sheet #6, Part IV

ANSWERS TO ASSIGNMENT SHEETS

FORM 4.6 **PAGE**

INTERMEDIATE AND LONG TERM MULTIPAYMENT NOTE AND MORTGAGE RECORD

CREDITOR Implement Dealer

PURPOSE Purchase Combine

TERMS 5year - constant payment - 14% interest

REPAYMENT SCHEDULE				REPAYMENT RECORD				
DATE	TOTAL	INTEREST	PRINCIPAL	DATE	TOTAL FORM 2.1	INTEREST FORM 2.1 COL. 27	PRINCIPAL FORM 2.5 COL. 50	UNPAID PRINCIPAL BALANCE
7/12/83				7/12/83	Beginning	Balance		70,000.00
7/12/84	20384	9,800.00	10,584.00	7/11/84	20384.00	9,800.00	10,584.00	59,416.00
7/12/85	20384	8.318.25	12,065.75	7/10/85	20384.00	8,318.25	12,065.75	47,350.25
7/12/86	20384	6.629.00	13,755.60					
7/12/87	20384	4.703.35	15,680.65					
7/12/88	20384	2,469.40	17,914.60					
	1	2	3		4	5	6	7

Assignment Sheet #7

FORM 4.7 **PAGE** 19 **HIRED LABOR RECORD**

Employee's Name Keith Harp

Address Rt. #1, Stillwater, OK 74074

Social Security No. 000 - 00 - 0000

DATE	HRS TIME WRKD	ENT REF CODE	TOTAL WAGES	DEDUCTIONS - reference only				NET PAID FORM 2.1 COL 25
				FEDERAL W H	STATE W H	F I C A	OTHER	
1/5	80	Dairy	360.00			24.12		335.88
1/31	80	Dairy	360.00			24.12		335.88
2/28	160	Dairy	720.00			48.24		671.76
3/30	160	Dairy	720.00			48.24		671.76
	90	Wheat	405.00			27.14		377.86
4/30	160	Dairy	720.00			48.24		671.76
	80	Stockers	360.00			24.12		335.88
	80	Peanuts	360.00			24.12		335.88
TOTAL		▨						

Employee's Name

Address

Social Security No.

DATE	HRS TIME WRKD	ENT REF CODE	TOTAL WAGES	DEDUCTIONS - reference only				NET PAID FORM 2.1 COL 25
				FEDERAL W H	STATE W H	F I C A	OTHER	
TOTAL		▨						

Assignment Sheet #8, Part I

ANSWERS TO ASSIGNMENT SHEETS

FORM 5.1 **PAGE** **MONTH** MARCH **19**

FAMILY LIVING AND PERSONAL EXPENDITURES

LINE	DATE	TOTAL COST $ ¢	DESCRIPTION	FOOD $ ¢	CLOTHING $ ¢	HOUSE HOLD OPER'NG $ ¢	TELEPHONE $ ¢	HEATING FUEL $ ¢	HOUSEHOLD FURN'G $ ¢	UTILITIES $ ¢	ENTERTAINMENT RECREATION GIFTS $ ¢	HOUSE REPAIRS IMPV'MTS RENT $ ¢	EDUC. AND READING $ ¢	PERSON'L ITEMS $ ¢	LINE
			Subtotals brought from preceding page												
1	1	125 00	OKLAHOMA FFA ALUMNI life membership												1
2	2	30 00	STILLWATER FFA Booster CALF FRY	30 00											2
3	2	10 00	Paul Magruder- PICTURE FRAMES						10 00						3
4	2	59 82	WAL Mart			59 82									4
5	2	15 14	S.W. Bell				15 14								5
6	2	4 00	Koloud Tarapolsi-paper										4 00		6
7	5	91 08	IGA-groceries	91 08											7
8	12	212 00	OG&E							212 00					8
9	12	184 00	Master Charge		72 00										9
10	12	62 00	Stillwater School - KID LUNCH	62 00											10
11	13	79 12	Best Yet - groceries	79 12											11
12	13	65 97	IGA - Groceries	65 97											12
13	15	92 15	Life Insurance												13
14	15	30 00	Quick Trip	3 25										9 75	14
15	21	102 17	IGA - groceries	102 17											15
16	22	1150 12	Richard's-furn. - Bedroom						1150 12						16
17	28	28 00	Terry Miller DDS												17
18	30	475 00	Deductions - wife's SALARY												18
19															19
20															20
21															21
22															22
23															23
		2815 57	Subtotals to next page	433 59	72 00	59 82	15 14		1160 12	212 00			4 00	9 75	
				1	2	3	4	5	6	7	8	9	10	11	

Assignment Sheet #8, Part I

ANSWERS TO ASSIGNMENT SHEETS

FORM 5.2 **PAGE** **MONTH** March **19**

NON FARM RECEIPTS AND EXPENDITURES

LINE	PERSONAL CAR AND TRAVEL EXPENSE	INSURANCE LIFE NON-MED NON-FARM	INSURANCE HEALTH AND ACCIDENT	MEDICAL EXPENSES doc.or hospital ambulance glasses	PERSCRIPT DRUGS MEDICINES	MEDICAL MILEAGE	TAX DEDUCT CONTRIBUTIONS	INCOME TAX SOC SEC SAVINGS INVEST	NON FARM INTEREST PAYMENTS	NON-FARM PRINCIPAL PAYMENTS & TRANSF TO FARM ACCOUNTS	DATE	DESCRIPTION	NON TXBL RECEIPTS transfers inherit refunds	TAXABLE RECEIPTS wages stock div interest	RELATED DEDUCT EXPEND	LINE
	$ ¢	$ ¢	$ ¢	$ ¢	$ ¢		$ ¢	$ ¢	$ ¢	$ ¢			$ ¢	$ ¢	$ ¢	
											30	Wife's Salary		1,500 00		
1							125 00				30	El Paso Oil - Lease		900 00		1
2											30	Grandma Reimburse	25 00			2
3																3
4																4
5																5
6																6
7																7
8																8
9	112 00															9
10																10
11																11
12																12
13		92 15														13
14	17 00															14
15																15
16																16
17				28 00												17
18			66 17					408 83								18
19																19
20																20
21																21
22																22
23																23
	129 00	92 15	66 17	28 00			125 00	408 83					25 00	2,300 00		
	12	13	14	15	16		17	18	19	20			21	22	23	

Assignment Sheet #8, Part II

ANSWERS TO ASSIGNMENT SHEETS

FORM 5.1 **PAGE** **MONTH** **19___** **FAMILY LIVING AND PERSONAL EXPENDITURES**

LINE	DATE	TOTAL COST		DESCRIPTION	FOOD		CLOTH-ING		HOUSE HOLD OPER'NG		TELE-PHONE		HEATING FUEL		HOUSE-HOLD FURN'G		UTILITIES		ENTER-TAINMENT RE CREATION GIFTS		HOUSE REPAIRS IMPV'MTS RENT		EDUC AND READING		PERSON'L ITEMS		LINE
		$	¢		$	¢	$	¢	$	¢	$	¢	$	¢	$	¢	$	¢	$	¢	$	¢	$	¢	$	¢	
				Subtotals brought from preceding page																							
1		1902	00	January	375	00			49	12	10	00					200	88	391	00			15	00	45	00	1
2		2514	00	February	327	00	210	00	78	92	10	00					225	08	344	00	817	68	15	32			2
3		2815	57	March	433	59	72	00	59	82	15	14			1160	12	212	00					4	00	9	75	3
4				April																							4
5				MAY																							5
6				June																							6
7				July																							7
8				AUGUST																							8
9				September																							9
10				October																							10
11				November																							11
12				December																							12
13																											13
14																											14
15																											15
16																											16
17																											17
18																											18
19																											19
20																											20
21																											21
22																											22
23																											23
				Subtotals to next page																							
					1		2		3		4		5		6		7		8		9		10		11		

Assignment Sheet #8, Part II

ANSWERS TO ASSIGNMENT SHEETS

FORM 5.2 **PAGE** **MONTH** **19____**

NON FARM RECEIPTS AND EXPENDITURES

LINE	PERSONAL CAR AND TRAVEL EXPENSE		INSURANCE LIFE NON-MED NON-FARM		INSURANCE HEALTH AND ACCIDENT		MEDICAL EXPENSES doctor hospital ambulance glasses		PERSCRIPT DRUGS MEDICINES		MEDICAL MILEAGE	TAX DEDUCT CONTRIBUTIONS		INCOME TAX SOC SEC SAVINGS INVEST		NON FARM INTEREST PAYMENTS		NON-FARM PRINCIPAL PAYMENTS & TRANSF TO FARM ACCOUNTS		DATE	DESCRIPTION	NON-TXBL RECEIPTS transfers inherit refunds		TAXABLE RECEIPTS wages stock div interest		RELATED DEDUCT EXPEND		LINE
	$	¢	$	¢	$	¢	$	¢	$	¢		$	¢	$	¢	$	¢	$	¢			$	¢	$	¢	$	¢	
1	198	68	92	15	66	17	20	00	30	17				408	83						NON-FARM INCOME			1,500	00			1
2	168	85	92	15	66	17	50	00						408	83						NON-FARM INCOME			1,500	00			2
3	129	00	92	15	66	17	28	00				125	00	408	83						NON-FARM INCOME	23	00	2,300	00			3
4																												4
5																												5
6																												6
7																												7
8																												8
9																												9
10																												10
11																												11
12																												12
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17																												17
18																												18
19																												19
20																												20
21																												21
22																												22
23																												23
	12		13		14		15		16			17		18		19		20				21		22		23		

RECORD KEEPING
UNIT II

TEST

NAME ______________________________ SCORE ____________

1. Match terms associated with record keeping to their correct definitions. Write the correct numbers in the blanks.

_____a. Historical data about a particular farm operation

_____b. Any funds, services, or materials received as income from payment for commodities, services, or loans

_____c. Any outlay of funds or materials as payment for goods and services

_____d. Receipt or expenditure that is the result of some activity within the farm business

_____e. Receipt or expenditure that is the result of some activity outside the farm business

_____f. Historical record of monthly cash inflows and outflows for a specified period of time, usually one year

_____g. Estimate of monthly cash flows over a period of time, usually one year

1. Cash flow summary
2. Expenditures
3. Farm records
4. Cash flow projection
5. Farm income or expense
6. Receipts
7. Nonfarm income or expense

2. State three reasons for keeping farm records.

a. ______________________________

____

b. ______________________________

____

c. ______________________________

____

TEST

3. Match types of records to their correct uses. Write the correct numbers in the blanks.

_____a.	Indicate monetary receipts and expenditures for the business during the year	1. Physical records
_____b.	Record production of crop and/or livestock enterprises	2. Financial records

4. State two factors to consider in selecting a records system best suited to the farm operation.

a. ____

b. ____

5. Match levels of farm record keeping to their correct definitions. Write the correct numbers in the blanks.

_____a.	Record of cash expenditures, cash receipts, and depreciation on farm machinery and buildings	1. Taxes plus some business analysis
_____b.	Organized way of taking a complete inventory and recording labor and production information	2. Complete farm business analysis
_____c.	Record of cash transactions, physical quantities, inventory, depreciation, and all information necessary to complete whole farm and detailed enterprise analyses	3. Tax purposes

TEST

6. Complete record information needed for various types of farm business analyses. Write an "X" in each appropriate space.

RECORD INFORMATION NEEDED

	Income Tax	Income Statement	Net Worth Statement	Cash Flow Statement	Whole Farm Analysis	Detailed Enterprise Analysis	Family-Living Statement
Financial Transactions Farm income and expenses							
Nonfarm tax deductions							
Nonfarm income and expenses							
Debt payments							
Inventory Depreciation schedule							
Other farm assets							
Nonfarm assets							
Record of debts							
Production Records Feed records							
Livestock production							
Livestock expenses							
Crop yields							
Crop expenses							
Labor Records Operator labor							
Family labor							
Hired labor							

TEST

7. Distinguish between cash method and accrual method of reporting farm income. Write a "C" for cash and an "A" for accrual.

_____a. Inventories must be used to determine gross income

_____b. Income must be reported in the year that cash, or its equivalent, is received

_____c. Deductions for farm expense items are made in the year in which they are paid out

_____d. Sales are treated as income when the price of the item is recoverable

_____e. Cost of items purchased for resale is not deductible until the year the item is sold

_____f. Expenses are deductible when payable

8. State advantages and disadvantages of cash method.

a. Advantages

1) ______________________________

2) ______________________________

3) ______________________________

b. Disadvantages

1) ______________________________

2) ______________________________

3) ______________________________

9. State advantages and disadvantages of accrual method.

a. Advantages

1) ______________________________

____

2) ______________________________

____

3) ______________________________

____

TEST

b. Disadvantages

1) ______________________________

2) ______________________________

3) ______________________________

4) ______________________________

10. State five tips for keeping records.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

11. Arrange in order steps in record keeping. Write a "1" before the first step, a "2" before the second step, and so on.

_____a. Enter record of receipts, expenses, and production

_____b. Complete depreciation schedule

_____c. Enter beginning-of-year inventories

_____d. Complete farm analysis

_____e. Set up depreciation schedule

_____f. Enter end-of-year inventories

12. State four suggestions for making entries in a farm record book.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

TEST

13. Match types of farm income to their correct definitions. Write the correct numbers in the blanks.

______a. Receipts from sale of raised crops

______b. Receipts from participation in government programs

______c. Payment received for doing machine work for someone else

______d. Dividends received from a cooperative

______e. Amounts reimbursed for an item for which farmer has taken a deduction

______f. Receipts from items purchased for resale

______g. Rent received from material participation in farming operation

______h. Proceeds received from participating in CCC loan program

______i. Proceeds received as the result of crop damage

______j. Receipts from products produced by livestock

______k. Receipts from sale of livestock not included in breeding herd

______l. Receipts from sale of livestock purchased for resale

______m. Receipts from the sale of items not included in other income categories

______n. Receipts from sale of capital assets.

1. Patronage dividends
2. Cash rent
3. Crop sales
4. Custom work
5. Commodity credit loans (CCC)
6. Government payments
7. Refunds
8. Resales
9. Raised nonbreeding livestock
10. Capital sales
11. Livestock purchased for resale
12. Crop insurance
13. Miscellaneous
14. Livestock products

14. List four types of nonfarm income.

a. ____

b. ____

c. ____

d. ____

TEST

15. Match types of farm expenses to their correct definitions. Write the correct numbers in the blanks. Terms and definitions are continued on the next page.

_____a. Amounts of reasonable wages paid for regular farm labor, piecework contract labor, and other forms of labor hired to perform farming operations

_____b. Amounts paid for supplies necessary to maintain assets used in the farm business

_____c. Amounts paid on farm mortgages and other obligations incurred to carry on the farm business

_____d. Amounts paid for feed to be consumed by livestock

_____e. Amounts paid for seeds and plants used in farming

_____f. Amounts paid for materials to enrich, neutralize, or condition land used in farming, including the cost of application

_____g. Amounts paid for hiring machinery to carry on farming operation

_____h. Amounts paid for any item that was bought for use in the farm business

_____i. Amounts paid for breeding of farm livestock

_____j. Amounts paid for veterinarian services and livestock medicine

_____k. Amounts paid for cost of gasoline, fuel, and oil used in farm business

_____l. Amounts paid for commercial storage of farm commodities

_____m. Amount of taxes incurred in the farm business

_____n. Amounts of premiums paid for casualty insurance on assets used in the farm business and for life, health, and accident insurance policies for employees

1. Interest
2. Seeds and plants
3. Hired labor
4. Feed
5. Machine hire
6. Repairs and maintenance
7. Fertilizers, lime, and chemicals
8. Supplies
9. Fuel and oil
10. Breeding fees
11. Insurance
12. Taxes
13. Veterinary medicine
14. Storage

TEST

_____o. Percentage of amounts paid attributable to business use

_____p. Amounts of rent paid in cash

_____q. Amounts paid for transportation to market and for business travel and entertainment

_____r. Amounts paid for soil and water conservation in respect to land used for farming or for the prevention of erosion to land used in farming

_____s. Amounts paid for livestock to be resold at another time

_____t. Amounts paid for purchase of capital assets

_____u. Amounts paid for items not included in other expense categories

15. Capital purchases
16. Conservation and land clearing
17. Freight and trucking
18. Livestock purchased for resale
19. Miscellaneous
20. Utilities
21. Cash rent

16. List types of nonfarm expenses.

a. ____

b. ____

c. ____

17. Select from the following list benefits of a cash flow summary. Write an "X" in the blank before each correct answer.

_____a. Provides record of monthly cash inflows and outflows

_____b. Allows an accuracy check with bank statement

_____c. Allows estimation of monthly cash flows over a period of time

_____d. Allows comparison with cash flow projection

_____e. Provides record of assets and liabilities

TEST

18. Match types of credit records to their correct uses. Write the correct numbers in the blanks.

______a. Used for short-term loans or credit lines owed to the farm

______b. Used for intermediate and long-term loans made by the farm

______c. Used for open accounts owed by the farm

______d. Used for notes owed by the farm that are due within one year, and upon which several payments will or may be made

______e. Used for loans owed by the farm that are, all or in part, due after one year

1. Credit lines and short-term multipayment notes
2. Open accounts payable
3. Open accounts receivable
4. Intermediate and long-term multipayment note and mortgage record
5. Notes and mortgages receivable

19. State purposes of keeping hired labor records.

a. ______________________________

b. ______________________________

c. ______________________________

20. Select from the following list reasons for keeping nonfarm business and family-living records. Write an "X" in the blank before each correct answer.

______a. Identifying farm income and expenses

______b. Identifying family-living receipts and expenses

______c. Accounting for income and expenses not listed in farm records

______d. Showing record of farm and family liabilities

______e. Developing future family budgets

______f. Identifying nonfarm business income and expenses

______g. Showing income from crop and livestock sales

(NOTE: Test questions 21-28 list the assignment sheets. They are an important part of this test. If they have not been completed, check with your instructor.)

21. Determine record information needed for the farm business.

TEST

22. Complete posting of farm and nonfarm receipts.

23. Complete posting of farm and nonfarm expenditures.

24. Complete a cash flow summary form.

25. Complete an accounts receivable form.

26. Complete accounts payable and credit records.

27. Complete a hired labor record form.

28. Complete posting of family-living records.

RECORD KEEPING
UNIT II

ANSWERS TO TEST

1. a. 3 e. 7

   b. 6 f. 1

   c. 2 g. 4

   d. 5

2. Answer should include any three of the following

   a. To comply with tax reporting requirements and to assist in tax planning and management

   b. To measure financial success and progress of farm business over time

   c. To establish a factual basis for comparisons with past years, with goals that have been set, and with the performance of other comparable operations

   d. To aid in planning for the future by providing data that will help in estimating the effects of operational changes on economic conditions of the farm business

   e. To aid in obtaining credit

3. a. 2

   b. 1

4. Answer should include any two of the following

   a. Amount of information wanted and in what detail

   b. Amount of time devoted to record keeping

   c. Record-keeping ability

5. a. 3

   b. 1

   c. 2

ANSWERS TO TEST

6.

	RECORD INFORMATION NEEDED						
	Income Tax	Income Statement	Net Worth Statement	Cash Flow Statement	Whole Farm Analysis	Detailed Enterprise Analysis	Family-Living Statement
Financial Transactions							
Farm income and expenses	X	X		X	X	X	
Nonfarm tax deductions	X						X
Nonfarm income and expenses	X			X			X
Debt payments	X			X			
Inventory							
Depreciation schedule	X	X	X		X	X	
Other farm assets		X	X		X	X	
Nonfarm assets			X		X		
Record of debts			X		X		
Production Records							
Feed records					X	X	
Livestock production					X	X	
Livestock expenses						X	
Crop yields					X	X	
Crop expenses						X	
Labor Records							
Operator labor					X	X	
Family labor					X	X	
Hired labor	X				X	X	

ANSWERS TO TEST

7.	a.	A	d.	A
	b.	C	e.	C
	c.	C	f.	A

8. a. Advantages

    1) Only cash income and cash expense records must be kept

    2) Choices can be made about when to incur income and when to deduct expenses

    3) Cash is available to pay the tax when a profit is shown

   b. Disadvantages

    1) Income may be erratic

    2) Expenses are not deductible until paid

    3) Change in inventory must be determined to compute net farm income

9. a. Advantages

    1) Levels out hills and valleys of income without the necessity of year-end manipulations

    2) Is easy to determine net farm income because inventory is readily available

    3) Aids in analyzing strong and weak points of farm business from year to year

   b. Disadvantages

    1) Requires detailed and complex records

    2) Requires carrying inventory at a value determined by an approved method

    3) Requires work with abstract figures

    4) May show profit only on paper with no cash to pay taxes

ANSWERS TO TEST

10. Answer should include any five of the following
    - a. Develop habit of keeping your record book up to date
    - b. Enter cash transactions daily or weekly
    - c. Enter checks as written or at least once a month
    - d. Deposit all farm income in your bank account
    - e. Identify all items on your deposit slip
    - f. Do most of your farm business by check
    - g. Get your bank statement each month and check your record book with it
    - h. Write a complete description of sales or purchase entries

11. a. 3
    - b. 5
    - c. 1
    - d. 6
    - e. 2
    - f. 4

12. Answer should include any four of the following
    - a. Become familiar with your record book before using it
    - b. Use bookmarkers to identify work areas
    - c. Fill every line of each page completely before going to next page
    - d. Subtotal each page, and total the last page each month
    - e. Use a sharp pencil with a medium-hard lead

ANSWERS TO TEST

13.	a.	3	h.	5
	b.	6	i.	12
	c.	4	j.	14
	d.	1	k.	9
	e.	7	l.	11
	f.	8	m.	13
	g.	2	n.	10

14. Answer should include any four of the following

a. Wages, salaries, and other earnings

b. Rental

c. Nontaxable

d. Interest received

e. Investments

f. Depletion income

15.	a.	3	h.	8	o.	20
	b.	6	i.	10	p.	21
	c.	1	j.	13	q.	17
	d.	4	k.	9	r.	16
	e.	2	l.	14	s.	18
	f.	7	m.	12	t.	15
	g.	5	n.	11	u.	19

ANSWERS TO TEST

16. a. Personal, living, and family
    b. Nonfarm business
    c. Nontaxable

17. a, b, d

18. a. 3
    b. 5
    c. 2
    d. 1
    e. 4

19. a. To complete tax forms
    b. To determine incentive plans
    c. To facilitate management

20. b, c, e, f

21. Evaluated to the satisfaction of the instructor

22. Evaluated to the satisfaction of the instructor

23. Evaluated to the satisfaction of the instructor

24. Evaluated to the satisfaction of the instructor

25. Evaluated to the satisfaction of the instructor

26. Evaluated to the satisfaction of the instructor

27. Evaluated to the satisfaction of the instructor

28. Evaluated to the satisfaction of the instructor

INVENTORY AND NET WORTH STATEMENT
UNIT III

UNIT OBJECTIVE

After completing this unit, the cooperator should be able to complete a beginning inventory and complete and interpret a beginning net worth statement. The cooperator will show this knowledge by completing assignment sheets and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the cooperator should be able to

1. Match to their correct definitions terms associated with inventory and net worth statements
2. State reasons for keeping inventory records.
3. Select from a list factors that determine inventory date.
4. List items to be included in an inventory.
5. List the parts of an inventory.
6. Select from a list guidelines for making a physical count.
7. Match to their correct descriptions methods of valuation for farm inventories.
8. Distinguish between current value and book value methods of valuation.
9. Select from a list guidelines for estimating current inventory values of machinery and equipment.
10. State guidelines for estimating current inventory values of livestock.
11. Match to their correct descriptions guidelines for estimating current inventory values of real estate and buildings.
12. State guidelines for estimating current inventory values of feed, crops, and supplies.
13. State guidelines for crop inventory under government loan.
14. Select from a list guidelines for determining cash balances.
15. Distinguish between inventory of receivables and inventory of payables.

OBJECTIVE SHEET

16. Select from a list purposes of a net worth statement.

17. Distinguish among types of assets.

18. Define liabilities according to time.

19. List methods of evaluating net worth statements.

20. Match ratios to determine liquidity to their correct uses.

21. Match ratios to determine solvency to their correct uses.

22. Complete a beginning inventory of machinery and equipment.

23. Complete a beginning inventory of breeding livestock.

24. Complete a beginning inventory of real estate and buildings.

25. Complete a beginning inventory of livestock.

26. Complete a beginning inventory of feed, stored and growing crops, and supplies.

27. Complete a beginning inventory of receivables and payables.

28. Interpret a completed net worth statement.

29. Use a beginning-of-the-year checklist.

INVENTORY AND NET WORTH STATEMENT
UNIT III

SUGGESTED ACTIVITIES

I. Unit contents

    A. Objective sheet

    B. Suggested activities

    C. Supplements

        1. Supplement #1 — The Balance Sheet

        2. Supplement #2 — Instructions for Hollywood Squares Game

    D. Information sheet

    E. Assignment sheets

        1. Assignment Sheet #1 — Complete a Beginning Inventory of Machinery and Equipment

        2. Assignment Sheet #2 — Complete a Beginning Inventory of Breeding Livestock

        3. Assignment Sheet #3 — Complete a Beginning Inventory of Real Estate and Buildings

        4. Assignment Sheet #4 — Complete a Beginning Inventory of Livestock

        5. Assignment Sheet #5 — Complete a Beginning Inventory of Feed, Stored and Growing Crops, and Supplies

        6. Assignment Sheet #6 — Complete a Beginning Inventory of Receivables and Payables

        7. Assignment Sheet #7 — Interpret a Completed Net Worth Statement

        8. Assignment Sheet #8 — Use a Beginning-of-the-Year Checklist

    F. Answers to assignment sheets

    G. Test

    H. Answers to test

SUGGESTED ACTIVITIES

II. Instructor's guide

A. Make transparencies of appropriate inventory forms and net worth statement from record book.

B. Provide cooperators with objective sheet.

C. Discuss unit and specific objectives.

1. Emphasize the importance of an accurate and complete beginning inventory.

   EXAMPLES: Beginning net worth statement, whole farm and detailed enterprise analyses, beginning cash balance on Cash Flow Summary

2. Emphasize the importance of gathering physical data.

   EXAMPLES: Returns per hundredweight, bushels per acre, feed cost per head, calving percentage, death loss, returns per man-year

D. Provide cooperators with information and assignment sheets.

E. Discuss information and assignment sheets.

1. Use Objective 1 to explain the importance of understanding the common terminology used in discussing inventories and net worth statements. You may wish to develop a crossword puzzle or word hunt to review terms after a class break.

2. When discussing Objective 2, emphasize whole farm analysis, and discuss how inventory is used for determining measures of performance. Point out the effect of inventories on obtaining credit, and the importance of complete and accurate inventories for determining net worth.

3. Discuss Objective 3 to help cooperators select the most appropriate inventory date. Point out that most cooperators enrolled in the farm business management program use January 1, as the inventory date.

4. Discuss Objective 4, pointing out that all owned assets and liabilities should be inventoried. Have cooperators brainstorm possible items to be inventoried. List their suggestions on the chalkboard.

5. Discuss Objectives 5 and 6. Point out that of the two parts, valuation is the more difficult. When discussing Objective 6, emphasize the need for accurate units of measurement (bushels, tons), particularly if detailed enterprise analysis is desired. Again, stress the importance of consistently taking inventory as of a single day, i.e., January 1.

SUGGESTED ACTIVITIES

6. When discussing Objective 7, emphasize the importance of being conservative and consistent in determining methods of valuation. Encourage cooperators not to change values of intermediate-term and long-term assets in a given year. Discuss the effects of "paper" profits and losses on management decisions.

7. Discuss objective 8. Explain the advantages of using conservative and consistent current values.

   a. Point out reasons for using current value.

      EXAMPLES: Keeping financial statements on a current basis

      Keeping insurance at an acceptable level

      Providing an up-to-date picture of current investments in the farm business

   b. Emphasize reasons for using book values.

      EXAMPLES: Providing information for income tax management and estate planning

      Providing information (i.e., Farmers Home Administration Coordinated Financial Statements) for loan applications

   c. Discuss consequences of unused investment tax credit, recapture of depreciation as ordinary income, and contingency tax liabilities.

8. Use transparencies of machinery and equipment inventory forms when discussing Objective 9. Explain that the inventory forms may also be used to set up a depreciation schedule, but that depreciation will be discussed in another unit. Have cooperators complete Assignment Sheet #1. Point out that most cooperators will use current "as-is" market values because of financial statements provided to creditors.

9. Use transparencies of breeding livestock inventory and depreciation forms when discussing Objective 10. Point out that these forms are used only for purchased breeding livestock. Have cooperators complete Assignment Sheet #2.

SUGGESTED ACTIVITIES

10. When discussing Objective 11, use transparencies to illustrate a real estate investment form. Explain that each form should include the land, as well as buildings and improvements on that land. Remind cooperators that each farm requires a separate form. Have cooperators complete Assignment Sheet #3. Discuss income tax liability and selling expenses that need to be recognized if cooperator uses current value of land.

11. Discuss Objective 12, emphasizing the importance of a systematic approach for recording inventory. Cooperators tend to be lax in this area.

    a. Use a transparency to illustrate a livestock inventory form. Have cooperators complete Assignment Sheet #4. Emphasize the importance of using conservative and consistent values.

    b. Use a transparency to illustrate an inventory form for feed, stored and growing crops, and supplies. Have cooperators complete Assignment Sheet #5.

12. Discuss Objective 13, stressing the importance of keeping abreast of new income tax laws and current government programs. Different tax elections determine whether the crop is an asset, a liability, or neither.

13. Discuss Objective 14. You may want to review Unit II, "Record Keeping." Emphasize the importance of the cash balance when using the Cash Flow Summary.

14. Discuss Objective 15 to point out the difficulty that many cooperators have in determining what they owe and what others owe them. It is important that the beginning credit balance is correct for the net worth statement, and that the beginning cash balance is correct for the Cash Flow Summary. Have cooperators complete Assignment Sheet #6.

15. When discussing Objective 16, use Supplement #1, "The Balance Sheet," to illustrate that most cooperators will use a net worth statement to determine collateral for obtaining credit. The net worth statement assists the cooperator in determining whether to continue to put money into the farm business.

16. Use transparencies to illustrate a net worth statement when discussing Objectives 17 and 18. Point out the following:

    a. Current assets are typically consumed or sold by the business in one year.

SUGGESTED ACTIVITIES

   b. Intermediate assets are consumed or used by the business for one to ten years.

   c. Current liabilities are usually claims against current assets of the farm.

   d. Intermediate liabilities are usually claims on intermediate-term assets.

   e. Long-term liabilities are counterparts of fixed assets.

17. Discuss Objectives 19 through 21, and then have cooperators complete Assignment Sheet #7. Have available copies of the current comparative analysis for your area and state.

   a. Point out that there are no sure answers for the ratios. Decisions will be based upon the cooperator's stage in the farm firm cycle (establishment, expansion, consolidation, or transfer), and the cooperator's attitude toward risk.

   b. Explain the difference between net capital ratio (farm and nonfarm) and net capital ratio (farm).

18. Have cooperators review a net worth statement, using Supplement #2, "Instructions for Hollywood Squares Game."

19. Have cooperators make a list of all owned assets and liabilities as of January 1 as an assignment for individual on-farm instruction. Encourage cooperator to enter inventory into record system. You should be prepared to assist the cooperator in determining inventory values and in completing a beginning net worth statement. Use Assignment Sheet #8 as a checklist for starting a new records system.

F. Give test.

G. Critique test.

H. Reteach if necessary.

III. Unit references

A. Albracht, James. *Kansas Postsecondary Farm and Ranch Management Project: Farm Management Basic Core Curriculum.* Pittsburg, Kansas: Pittsburg State University/Vocational Curriculum Materials Center, n.d.

B. Denker, Robert, et al. *Unit I for Farm Business Management Analysis: Establishing a Farm Accounting System.* Columbia, Missouri: Instructional Materials Laboratory, University of Missouri-Columbia, Volume 13 Number 6, March 1981.

SUGGESTED ACTIVITIES

C. Hardin, Mike L., and Joseph E. Williams. *Oklahoma Young Farmer Record Book*. Stillwater, Oklahoma: State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1981.

D. Hodgens, Jim, and Leland Myers. *Farm Business Management Year I*. Stillwater, Oklahoma: State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1979.

E. *I & T Farm Tractor Trade-In Guide*. Overland Park, Kansas: Technical Publications, 1983.

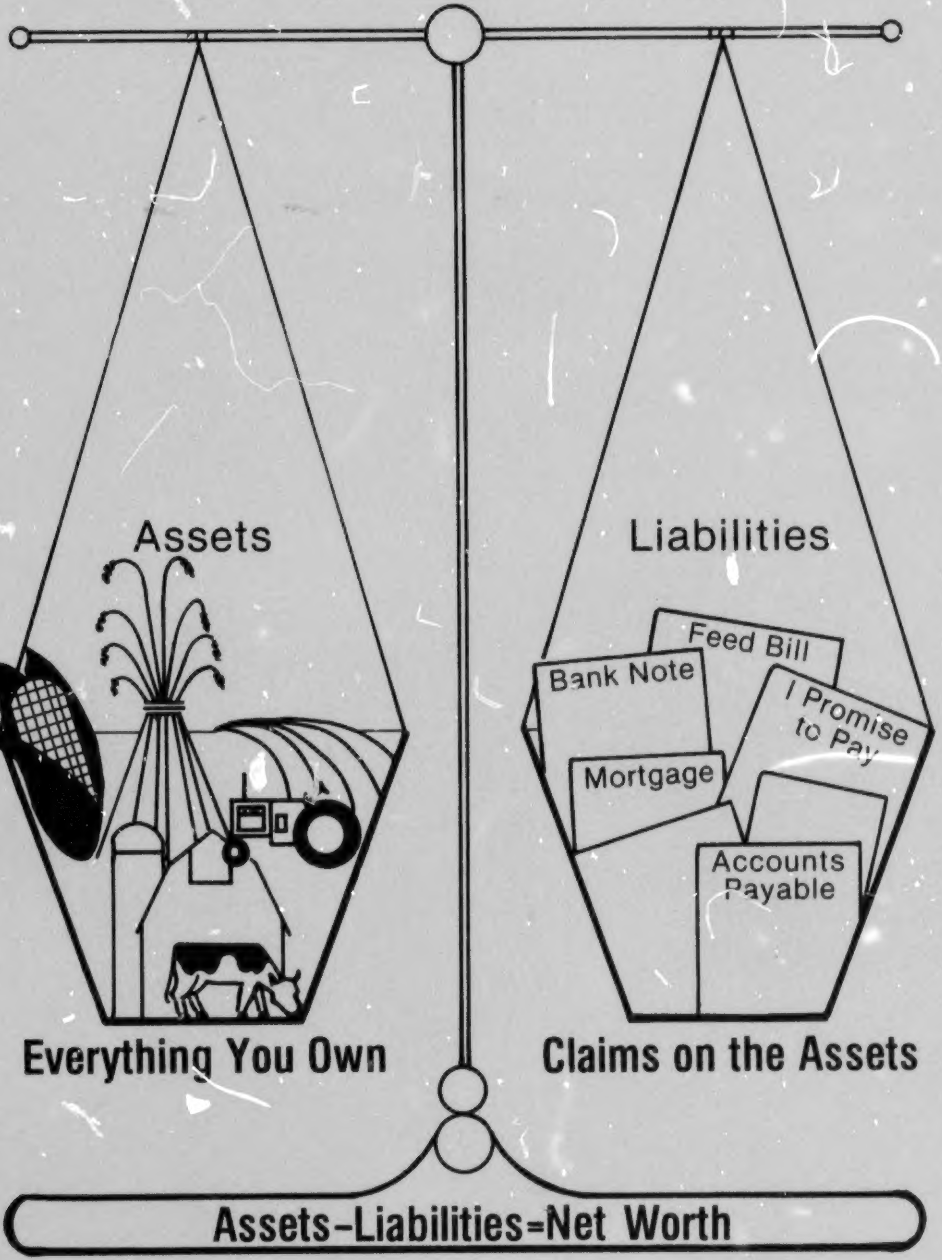
F. Osborn, Donald D., and Kenneth C. Schneeberger. *Modern Agriculture Management*. Stillwater, Oklahoma: State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1981.

G. Steward, Jim. *Farm Business Management, Volume II*. Stillwater, Oklahoma: State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1981.

SUGGESTED ACTIVITIES

SUPPLEMENT #1 — THE BALANCE SHEET

The Balance Sheet


Assets
Liabilities
Feed Bill
Bank Note
I Promise to Pay
Mortgage
Accounts Payable
Everything You Own
Claims on the Assets
Assets-Liabilities=Net Worth

SUGGESTED ACTIVITIES

SUPPLEMENT #2 — INSTRUCTIONS FOR HOLLYWOOD SQUARES GAME

Set up the game Hollywood Squares.

A. Object — To review financial ratios associated with a net worth statement

B. Preparation

1. Make a copy of Supplement #2(A) and Supplement #2(B) (both sides) for each cooperator in class.
2. Have cooperators cut out each block on Supplement #2(B).

C. Playing instructions

1. Match the ratio formulas in the squares on #2(A) with the names of the financial ratios given on the cut-out blocks #2(B) by placing the correct cut block on the appropriate square on #2(A).
2. Check answers by placing a sheet of paper over the completed puzzle. Holding the puzzle and sheet of paper securely, flip the puzzle over. Lift the sheet of paper. If the Balance Sheet (Supplement #1) appears correctly pictured, the answers to the game are correct.

SUPPLEMENT #2 (A)

Financial Ratios

$\frac{\text{Total Farm Current Assets}}{\text{Total Farm Current Liabilities}}$	$\frac{\text{Total Assets}}{\text{Total Liabilities}}$
$\frac{\text{Total Liabilities}}{\text{Net Worth}}$	$\frac{\text{Total Farm Current Assets} + \text{Total Farm Intermediate Assets}}{\text{Total Farm Current Liabilities} + \text{Total Farm Intermediate Liabilities}}$
$\frac{\text{Total Farm Assets}}{\text{Total Farm Liabilities}}$	$\frac{\text{Net Worth}}{\text{Total Assets}}$

SUPPLEMENT #2 (B)

Cut↓

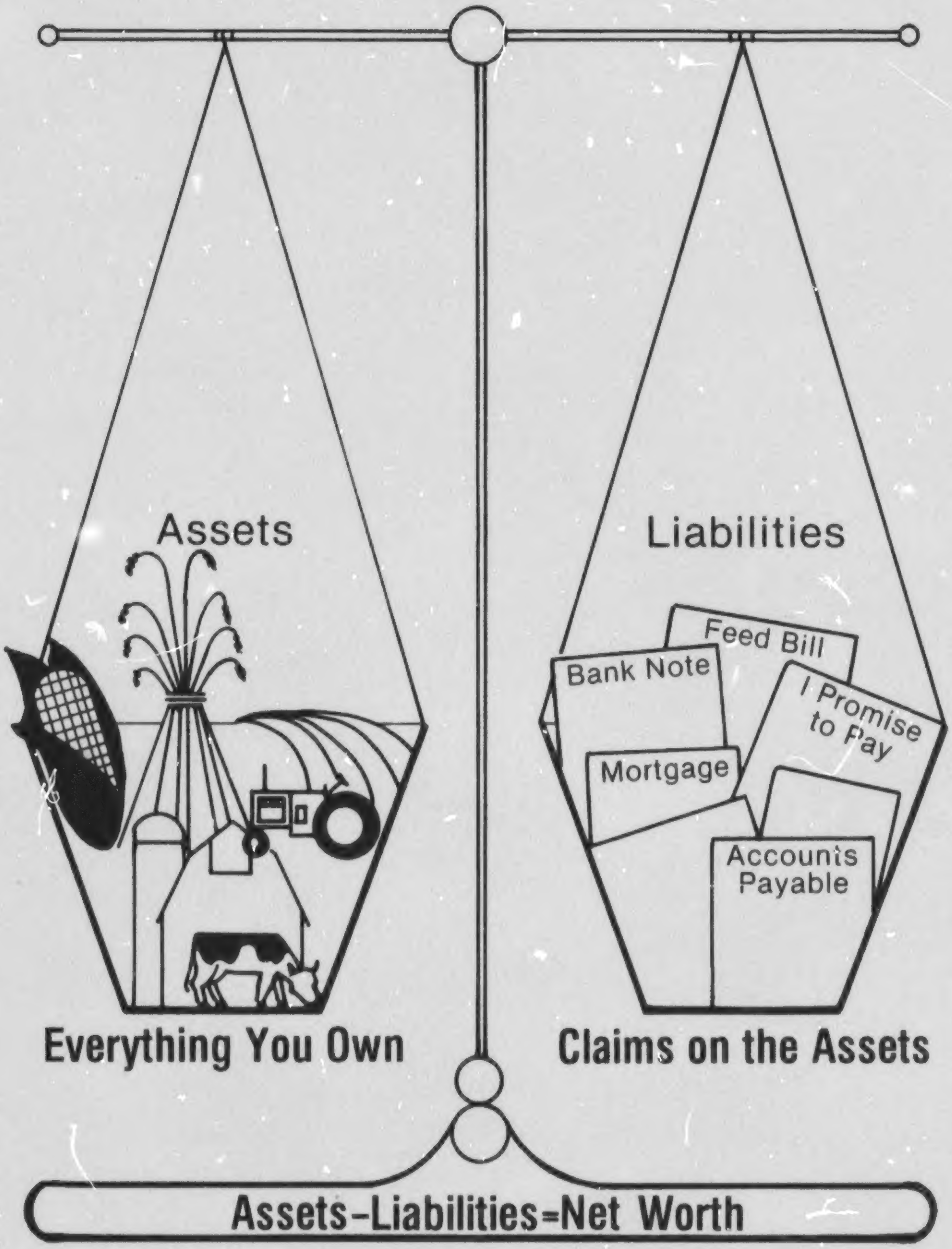
Up↑

Current Ratio (Farm)	Net Capital Ratio (Farm and Nonfarm)
Debt Equity Ratio	Working Asset Ratio (Farm)
Net Capital Ratio (Farm)	Percent Equity

SUPPLEMENT #2 (B)

Up ↑

The Balance Sheet


Assets
Liabilities
Feed Bill
Bank Note
I Promise to Pay
Mortgage
Accounts Payable
Everything You Own
Claims on the Assets
Assets-Liabilities=Net Worth

INVENTORY AND NET WORTH STATEMENT
UNIT III

INFORMATION SHEET

I. Terms associated with inventory and net worth statement

- A. Inventory — Assets used in or claimed by the farm business
- B. Collateral — Livestock, land, and other personal property used to secure a loan
- C. Net worth statement — Sheet that shows the financial condition at a definite point in time and lists all assets, values of assets, and liabilities of farm

  (NOTE: Net worth statements are also known as *balance sheets, financial statements*, or *statements of financial condition*.)
- D. Assets — Items or resources controlled by the farm business
- E. Liabilities — Financial claims against the farm business
- F. Liquidity — Farm business's capacity to generate sufficient cash to meet its financial obligations as they fall due
- G. Solvency — Farm business's ability to meet long-run claims against the business
- H. Net worth — Value of assets not claimed by individuals or firms outside the farm business or the owner's claim on the assets

  (NOTE: Net worth is sometimes called *owner's equity*.)
- I. Ratio — Relationship in quantity, amount, or size between two or more things
- J. Adjusted tax basis — Original cost of an asset, plus the value of improvements or alterations, less the cost of depreciation, losses, or depletion

II. Reasons for keeping inventory accounts

- A. To obtain a true picture of financial situation

  EXAMPLE: Net worth statement
- B. To reflect noncash income and expenses

  EXAMPLES: Income statement, changes in inventories

INFORMATION SHEET

C. To provide a management tool

EXAMPLE: Whole farm and detailed enterprise analyses

D. To place values on farm assets

EXAMPLE: Basis for insurance

E. To complete estate planning and settlement

F. To obtain credit

EXAMPLES: Financial statements, collateral

III. Factors that determine inventory date

A. Significance in farm operation

EXAMPLES: Date when farm work begins for year's crop, date tenant moved to farm, date of lease renewal, date livestock shifted from winter feed to summer pasture

B. Convenience to operator

EXAMPLES: Desirable when little else to do, period when there is small quantity of assets, period when completing tax information

(NOTE: For most farms, January 1 seems to be the most convenient date because of tax and management purposes.)

IV. Items to be included in an inventory

A. All unsold items at end of tax year

B. All livestock and poultry held primarily for sale

C. Livestock held for draft, breeding, dairy, or sporting purposes—whether raised or purchased

D. All harvested and purchased farm products held for sale or for feed or seed

E. Growing or standing crops

F. Machinery and equipment

G. Buildings

H. Land

INFORMATION SHEET

I. Cash balances

J. Accounts receivable

K. Accounts payable

L. Prepaid expense items

EXAMPLES: Prepaid insurance, prepaid cash rent

V. Parts of an inventory

A. Physical count

B. Valuation

VI. Guidelines for making a physical count

A. Measure quantities of items in commonly used units

EXAMPLES: Bushels for small grains, hundredweight and head for livestock, tons for hay, pounds and bales for cotton

(NOTE: Converting measured quantities into meaningful units can be troublesome. It may be necessary in the inventory process to measure the quantity of grain on hand in cubic feet, and count the number of bales of hay in the barn. Tables and conversion formulas that facilitate this process are available. Even though measurement under this method is not exact, it is usually accurate enough for practical purposes.)

B. Group like items

EXAMPLES: Stocker steers, raised sows, small hand tools

(NOTE: Grouping like items may be dictated by the farm analysis the operator wishes to make. Livestock is usually grouped under one classification, such as beef, dairy, swine; and further divided by type, age, or purpose.)

C. Take inventory on a single day *or* as of a single date

EXAMPLE: If inventory date is December 31, but the physical count is not made until January 5, a calf born on January 2 should not be included in the inventory.

VII. Methods of valuation for farm inventories

A. Market cost — Price at which an item was purchased

EXAMPLES: Feed, fuel, fertilizer, seed, supplies

(NOTE: This method works well for items that have been purchased recently and will be used within a relatively short period of time.)

INFORMATION SHEET

B. Net market price — Value of an item at the marketplace, less transportation and marketing charges

EXAMPLES: Grain on hand, raised breeding livestock, hay on hand

(NOTE: Net market price is the money the operator brings home from the sale of a product. This method works well for items for which a well-established market price exists.)

C. Cost or market value — Lower of production costs; original purchase price compared to current market price

EXAMPLES: Feed, grain on hand, farm machinery, raised livestock

(NOTE: This method is probably too conservative when prices are increasing, and not conservative enough when they are falling.)

D. Farm production costs — Actual amount invested in cost of producing a farm asset

EXAMPLES: Raised breeding livestock, growing crops

(NOTE: Production costs should not include profit, interest on investment, or the opportunity cost of the operator's labor and management. Generally, this method is most useful when valuing assets that have been produced on the farm and will be used in other farm activities.)

E. Cost minus depreciation — Assets that provide services to the farm business for a period longer than one year and become less valuable in the process

EXAMPLES: Machinery, equipment, purchased breeding livestock, buildings, fences

F. Cost minus depletion — Asset values that change in accordance with amount resource is displaced or removed

EXAMPLES: Oil and gas wells, gravel pit, timber stand

VIII. Current value and book value methods of valuation

(NOTE: Values and methods of valuation of financial statement items should reflect the purpose for which the statement will be used. Regardless of the methods selected to value assets, one should use the same method consistently. Consistency eliminates bias when assessing the financial progress and performance of the farm business. It also minimizes unearned profits and losses.)

A. Current value

1. Values all assets at a fair net market value

(NOTE: Value where there are ready, willing, and able buyers and sellers.)

2. Used to obtain or establish credit

INFORMATION SHEET

B. Book value

1. Values assets on an adjusted tax basis

2. Used for tax purposes and for tax and estate planning

IX. Guidelines for estimating current inventory values of machinery and equipment (Assignment Sheet #1)

A. Value at cost less depreciation

(NOTE: With inflation at the present rate, frequently the current market value of machinery may be much higher than the remaining book value or undepreciated balance.)

B. Value at conservative, current, "as-is" market value

(NOTE: Current market values may be obtained from a local implement dealer, or from trade publications that list current values.)

X. Guidelines for estimating current inventory values of livestock (Assignment Sheet #2)

A. Purchased breeding animals — Value at cost less depreciation

(NOTE: The cooperator will have to estimate weight.)

B. Raised breeding animals — Use a long-term average value

(NOTE: This value should remain constant for several years even though the market will fluctuate.)

C. Market animals — Value at current price less cost of marketing

D. Livestock purchased for resale — Value at purchase cost

XI. Guidelines for estimating current inventory values of real estate and buildings (Assignment Sheet #3)

A. Equipment and facilities that are an integral part of production — Value at cost less depreciation

EXAMPLES: Fences, pumps, grain bins, finishing floors

B. Buildings — Value at insured value plus 20 percent

(NOTE: Most insurance companies insure for 80 percent of the value. When estimating the life of a building, consider IRS guidelines, condition of the building, and costs of major repairs previously done.)

INFORMATION SHEET

C. Soil and water conservation expenses — Treat as current deductible expenses up to 25 percent of the gross farming in any year

EXAMPLES: Leveling, grading, terracing, dams, drainage channels, ponds

(NOTE: In order to keep a record of them, these improvements need to be listed even though they are not depreciated. If the farm is sold in less than ten years, all or part of the deduction of these expenses will be recaptured.)

D. Land-clearing expenses — Treat as current deductible expenses but limited to the lesser of $5,000 or 25 percent of the taxable income derived from farming during the taxable year

(NOTE: These improvements need to be listed even though they are not depreciated. Land-clearing expenses are subject to recapture if the farm is sold within ten years.)

E. Land improvements — Value at cost less depreciation

EXAMPLES: Tilling of land, installation of a water system, pipe used in a pond

F. Land — Value at conservative market value for the whole farm, less buildings and improvements

(NOTE: Many farmers and lenders prefer to update the current land value every five years for the purpose of making adjustments on the net worth statement. Some farmers prefer to use the book value or original cost of land less adjustments for buildings and improvements.)

XII. Guidelines for estimating current inventory value of feed, crops, and supplies (Assignment Sheets #4 and #5)

A. Raised crops — Use current market price less cost for marketing

B. Purchased items — Use cost delivered to the farm

EXAMPLES: Fuel, feed, crop and livestock supplies, hay for feed

C. Growing crops — Use production costs

EXAMPLE: Production costs for wheat on January 1 might include tillage costs (plowing, disking), seed wheat and drilling wheat, fertilizer, fertilizer application, and cash farm rent.

INFORMATION SHEET

XIII. Guidelines for crop inventory under government loan

(NOTE: Always check current guidelines for recording crops in government programs.)

A. Crops produced during the year that have been entered as a receipt should not be inventoried as an asset

B. Crops produced during the year that have not been entered as a receipt should be inventoried at government loan value

XIV. Guidelines for determining cash balances

A. Reconcile checking account bank statement with checkbook

B. Determine amount of cash on hand

XV. Inventory of receivables and payables (Assignment Sheet #6)

A. Receivables

1. Money owed to farm business

   EXAMPLE: Farm products sold but payment not yet received

2. Loans to others

3. Savings accounts

4. Stock in cooperatives

B. Payables

1. Money owed by farm business

   EXAMPLES: Feed bill, unpaid rent or taxes

2. Money borrowed

3. Accrued interest

XVI. Purposes of a net worth statement

(NOTE: A net worth statement is a common instrument used to measure financial progress in agriculture. It cannot measure profitability except to the extent of increases in net worth from year to year. It does not measure repayment capacity or the ability to meet financial obligations as they fall due.)

A. To measure financial position at a specific time

INFORMATION SHEET

B. To record growth in the farm business through changes in net worth

C. To provide an indication of the amount of debt supported by various classes of assets

D. To provide early warning through ratio analysis of problems that may arise in the short run, intermediate run, and long run

E. To reveal liquidity and solvency

XVII. Descriptions of types of assets

A. Current assets

EXAMPLES: Cash on hand, nonbreeding livestock, feed, crops, supplies, savings accounts, bonds, marketable securities, prepaid expenses, accounts receivable

1. Are cash and other liquid assets that may be quickly converted into cash without any loss in value
2. Have well-established markets
3. Have prices that are widely known

B. Intermediate assets

EXAMPLES: Machinery, equipment, tools, breeding stock, securities not easily marketed, irrigation equipment

(NOTE: These assets can be bought and sold on a regular basis. Turnover rate of these assets is considered to be greater than one year and less than ten years.)

1. Are primarily used in the production process
2. Are used up in more than one production period
3. Are not legally or directly attached to the land
4. Have markets that are negotiated by individuals
5. Have prices that may not be widely known
6. Are usually not easily converted to cash without some loss in value

SSS

INFORMATION SHEET

C. Long-term assets

EXAMPLES: Real estate, buildings, wells, terraces, fences

(NOTE: Long-term assets are also referred to as *fixed assets.*)

1. Are used in production and are considered permanent
2. Are not readily converted to cash because they are not normally held for sale
3. Have poorly established markets

XVIII. Liabilities according to time

(NOTE: Liabilities represent claims upon assets, and are usually grouped according to the time period in which they are due.)

A. Current liabilities — Claims falling due within one year

EXAMPLES: Accounts payable, accrued interest, taxes, rent, short-term notes due within the year, principal payment due during the coming year on intermediate and long-term liabilities

B. Intermediate liabilities — Claims that are for more than one year but less than ten years

EXAMPLES: Loans on irrigation equipment, machinery, equipment, breeding livestock

C. Long-term liabilities — Claims exceeding ten years in maturity

EXAMPLES: Real estate loans, building loans

XIX. Methods of evaluating net worth statements

A. Comparison with previous years

B. Comparison with other farms

EXAMPLE: Annual vo-tech summary farm analysis

C. Calculation of financial ratios

(NOTE: Certain ratios over time give valuable information that enables the cooperator to make necessary adjustments. Ratio analyses measure movements and trends in average relationships; they are, at best, indications of position with respect to previous points in time. Ratios yield important information about the financial structure of the farm, but do not indicate why strengths or weaknesses exist. Ratios will vary with the type and size of the farm business.)

INFORMATION SHEET

XX. Uses of ratios to determine liquidity

A. Current ratio — Used to give cooperator an idea of farm's ability to meet short-term payment obligations

(NOTE: Current ratio is calculated as *Current Assets divided by Current Liabilities*. For agriculture, a ratio of 2:1 is considered a good indicator of the farm's ability to meet short-term obligations; a ratio of 1:1 is marginal; a ratio below 1:1 indicates potential liquidity problems.)

B. Working asset ratio — Used to determine farm liquidity over an intermediate time span of one to ten years

(NOTE: Working asset ratio is calculated as *Current plus Intermediate Assets divided by Current plus Intermediate Liabilities*. Lenders who loan money on machinery and equipment would be interested in this ratio. A good rule of thumb in agriculture is a ratio of 3:1.)

XXI. Uses of ratios to determine solvency (Assignment Sheets #7 and #8)

A. Net capital ratio — Used as an indicator of long-term solvency of farm business

(NOTE: Net capital ratio is calculated as *Total Assets divided by Total Liabilities*. Lenders are interested because net capital ratio shows debt load in relation to the total asset value of the farm. Lenders generally like to see a ratio of 2:1, which indicates that the borrower has substantial risk-bearing ability. A ratio of less than one indicates that a business is insolvent and could not cover all of its debts if forced to liquidate.)

B. Debt-to-equity ratio — Used to measure farm's total financial obligations to creditors in relation to capital provided by farmer

(NOTE: Debt-to-equity ratio is calculated as *Total Liabilities divided by Net Worth*. Many lenders prefer that the borrower have at least as large an investment in the farm as the lender. Generally speaking, debt-to-equity ratios should be less than 1:1.)

C. Percent equity ratio — Used to measure risk-bearing ability of farm business

(NOTE: Percent equity ratio is calculated as *Net Worth divided by Total Assets times 100*. Lenders generally prefer to loan on a percent equity above 50 percent.)

INVENTORY AND NET WORTH STATEMENT
UNIT III

ASSIGNMENT SHEET #1 — COMPLETE A BEGINNING INVENTORY OF MACHINERY AND EQUIPMENT

NAME ______________________________ SCORE ______________

Two of the first pieces of record information a farmer needs are an inventory and a depreciation schedule. Most machinery and equipment forms contain a section for the depreciation schedule and a section for estimating the current inventory value.

(NOTE: Depreciation will be discussed in another unit.)

The information below, and the sample completed inventory form on the following page, outline the procedure for completing a beginning inventory of machinery and equipment.

- Enter date each item was acquired

  (NOTE: If item was built by farmer, enter date item was first included in inventory.)

- Enter description of item

  EXAMPLES: JD 4420 tractor; IH 16-foot offset disk; 1982 Ford ½-ton pickup

- Estimate inventory value and enter in appropriate column
- Leave one line at bottom of page to total inventory values

  (NOTE: Farmers with more than twenty-four items can add pages so that a complete inventory can be taken.)

- Write the disposition of an item on the appropriate line when an item is no longer used

  EXAMPLES: Junked; depreciated out; traded in on new 4430 tractor

ASSIGNMENT SHEET #1

EXAMPLE

FORM 3.1 **PAGE** **DEPRECIATION SCHEDULE:** ____________________ **MACHINERY AND EQUIPMENT**

LINE	DATE ACQUIRED	ITEM DESCRIPTION KIND OF MACHINE, MAKE, MODEL, SIZE	ID NO	NEW OR USED	INVEST CREDIT	COST INFORMATION REM'NG BOOK VALUE OF TRADE-IN	CASH DIFF PAID	TOTAL COST BASIS	ADDITL FIRST YEAR DEPREC	SALVAGE VALUE	DEPRECIATION INFORMATION BALANCE FOR REGULAR DEPREC	LIFE	METHOD	ANNUAL DEPREC % or $	DEPREC. TAKEN IN PRIOR YEARS	LINE
1	1/79	JD 4430 Tractor														1
2	8/79	MF 880 MB Plow														2
3	9/80	24' Gooseneck Trailer														3
4	9/80	15' Lindley Shedder														4
5	10/81	25' CB DISK														5
6	10/81	Versatile Tractor														6
7	4/82	82 Chev. Diesel Pickup														7
8	11/82	32' CB Drill														8
9	9/83	Melroe 32 Shank														9
10	12/83	83 Chev. Auto (Farm Share)														10
▨	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	▨

Present Plan______ Alternative Plan______

FORM 3.2 **PAGE** **DEPRECIATION SCHEDULE:** ________________ **MACHINERY AND EQUIPMENT (CONT'D)**

LINE	START 19___ REMAINING BK. VAL. AT START OF YEAR	END 19___ DEPREC THIS YEAR	REMAINING BOOK VALUE	END 19___ DEPREC THIS YEAR	REMAINING BOOK VALUE	END 19___ DEPREC. THIS YEAR	REMAINING BOOK VALUE	ESTIMATED CURRENT CASH VALUE START 1984	END 19___	END 19___	END 19___
1								15,000.00			
2								2,750.00			
3								2,500.00			
4								3,500.00			
5								5,000.00			
6								45,000.00			
7								9,045.00			
8								11,500.00			
9								5,250.00			
10								5,250.00			
11											
12							TOTALS	104,795.00			

ASSIGNMENT SHEET #1

Use the information below to complete the beginning inventory of machinery and equipment form on the following page.

January 1, 19____

Date Acquired	Description	Current "As-Is" Value
12/79	20-foot cattle feeder	$500.00
3/80	Portable corral	$1,100.00
12/80	Odessey for cattle	$995.00
6/81	Versatile tractor	$40,000.00
9/81	Big Ox plow	$950.00
1/82	Eight-row cultivator	$3,600.00

ASSIGNMENT SHEET #1

FORM 3.1 **PAGE** **DEPRECIATION SCHEDULE:** ____________ **MACHINERY AND EQUIPMENT**

LINE	DATE ACQUIRED	ITEM DESCRIPTION KIND OF MACHINE, MAKE, MODEL, SIZE	ID NO	NEW OR USED	INVEST CREDIT	COST INFORMATION REM'NG BOOK VALUE OF TRADE-IN	CASH DIFF PAID	TOTAL COST BASIS	ADDITL. FIRST YEAR DEPREC	SALVAGE VALUE	DEPRECIATION INFORMATION BALANCE FOR REGULAR DEPREC	LIFE	METHOD	ANNUAL DEPREC % or $	DEPREC. TAKEN IN PRIOR YEARS	LINE
1																1
2																2
3																3
4																4
5																5
6																6
7																7
8																8
9																9
10																10
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	

FORM 3.2 **PAGE** **DEPRECIATION SCHEDULE:** ____________ **MACHINERY AND EQUIPMENT (CONT'D)**

LINE	START 19___	END 19___		END 19___		END 19___		ESTIMATED CURRENT CASH VALUE			
	REMAINING BK VAL AT START OF YEAR	DEPREC THIS YEAR	REMAINING BOOK VALUE	DEPREC THIS YEAR	REMAINING BOOK VALUE	DEPREC THIS YEAR	REMAINING BOOK VALUE	START 19___	END 19___	END 19___	END 19___
1											
2											
3											
4											
5											
6											
7											
8											
9											
[illegible]											
25							TOTALS				
	16	17	18	19	20	21	22	23	24	25	26

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INVENTORY AND NET WORTH STATEMENT
UNIT III

ASSIGNMENT SHEET #2 — COMPLETE A BEGINNING INVENTORY OF BREEDING LIVESTOCK

NAME ________________________________ SCORE ______________

The only livestock entered on these forms are purchased breeding animals. Do not enter raised breeding animals because their costs were deducted under feed, veterinary medicine, and so forth, as they were raised. Also, do not enter livestock purchased for resale, such as stocker calves and feeder pigs, because they do not depreciate and are not producing animals.

(NOTE: Depreciation will be discussed in another unit.)

The information below, and the sample completed beginning inventory form on the following page, outline the procedure for completing a beginning inventory of breeding livestock.

- Enter date each animal or group of animals was acquired
- Enter description of animal(s)

  EXAMPLES: X-bred cows, registered Angus bull
- Enter total number of head on hand at start of year
- Estimate inventory value, and enter in appropriate column
- Leave one line at bottom of page to total inventory values

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ASSIGNMENT SHEET #2

EXAMPLE

FORM 3.3 **PAGE** **DEPRECIATION SCHEDULE** ____________ **LIVESTOCK FOR BREEDING**

LINE	Date Acquired	Item Description	Head in Lot When Acq.	Investment Credit	New or Used	PER HEAD DATA						START OF 19___					END OF				LINE
												Per Head		Head	Per Lot		Per Head		Head		
						Cost Basis	Salvage Value	Balance for Deprec.	Life	Method	Annual Deprec. % or $	Deprec. in Prior Years	Remaining Book Value	On Hand	Deprec. in Prior Years	Remaining Book Value	Deprec. This Year	Remaining Book Value	Sold or Died	On Hand	
1	1/80	Bred Heifers												30							1
2	1/81	Bred Heifers												20							2
3	7/82	Angus Bull												1							3
4																					4
5																					5
6																					6
7																					7
8																					8
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	

FORM 3.4 **PAGE** **DEPRECIATION SCHEDULE** ____________ **LIVESTOCK FOR BREEDING (CONT'D)**

LINE	19___		END OF 19___						END OF 19___						ESTIMATED CURRENT CASH VALUE				LINE
	Per Lot		Per Head		Head		Per Lot		Per Head		Head		Per Lot		Per Lot				
	Deprec. This Year	Remaining Book Value	Deprec. This Year	Remaining Book Value	Sold or Died	On Hand	Deprec. This Year	Remaining Book Value	Deprec. This Year	Remaining Book Value	Sold or Died	On Hand	Deprec. This Year	Remaining Book Value	Start 19 84	End 19___	End 19___	End 19___	
1															10500.00				1
2															7200.00				2
3															750.00				3
4																			4
5																			5
6																			6
7																			7
24																			24
25															18450.00				25
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	

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ASSIGNMENT SHEET #2

Use the information below to complete the beginning inventory of breeding livestock form on the following page.

January 1, 19____

10 Yorkshire sows purchased as bred gilts January 1, 1983, for $300 each. Current market value less selling costs is $175 each. The value at cost less depreciation is $225 each.

24 Raised X-bred sows; current market value less selling costs is $150 each.

1 Hampshire boar purchased on January 1, 1983, for $750. Current market value less selling cost is $600. The value at cost less depreciation is $562.50.

50 Hereford cows purchased as bred heifers March, 1980, for $500 each; current market value less selling costs is $600. The value at cost less depreciation is $390.

ASSIGNMENT SHEET #2

FORM 3. **PAGE** **DEPRECIATION SCHEDULE ____________** **LIVESTOCK FOR BREEDING**

LINE	Date Acquired	Item Description	Head in Lot When Acq.	Investment Credit	New or Used	PER HEAD DATA						START OF 19___					END OF				LINE
												Per Head		Head	Per Lot		Per Head		Head		
						Cost Basis	Salvage Value	Balance for Deprec.	Life	Method	Annual Deprec. % or $	Deprec. in Prior Years	Remaining Book Value	On Hand	Deprec. in Prior Years	Remaining Book Value	Deprec. This Year	Remaining Book Value	Sold or Died	On Hand	
1																					1
2																					2
3																					3
4																					4
5																					5
6																					6
7																					7
8																					8
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	

FORM 3.4 **PAGE** **DEPRECIATION SCHEDULE ____________** **LIVESTOCK FOR BREEDING (CONT'D)**

LINE	19___		END OF 19___						END OF 19___						ESTIMATED CURRENT CASH VALUE				LINE
	Per Lot		Per Head		Head		Per Lot		Per Head		Head		Per Lot		Per Lot				
	Deprec. This Year	Remaining Book Value	Deprec. This Year	Remaining Book Value	Sold or Died	On Hand	Deprec. This Year	Remaining Book Value	Deprec. This Year	Remaining Book Value	Sold or Died	On Hand	Deprec. This Year	Remaining Book Value	Start 19___	End 19___	End 19___	End 19___	
1																			1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
																			24
25																			25
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	

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INVENTORY AND NET WORTH STATEMENT
UNIT III

ASSIGNMENT SHEET #3 — COMPLETE A BEGINNING INVENTORY OF REAL ESTATE AND BUILDINGS

NAME ______________________________ SCORE ______________

The real estate investment and depreciation record is one of the most important records to keep. This information must be kept until the real estate is sold or transferred to someone else. Sometimes several years will pass between the purchase and sale of real estate. It is important to record information regarding improvements, buildings, and easements that may affect the basis value of the land.

The information below, and the sample completed real estate investment record on the following page, outline the procedure for completing an inventory of real estate and buildings.

- Enter date land was acquired
- Enter legal description of land

  (NOTE: Sometimes other descriptions may more readily identify location of farm land.)
- Determine original basis allocated to land

  EXAMPLES: Cash paid, carry over basis, settlement fees, debt assumed
- Determine reductions in basis

  EXAMPLES: Portion of basis allocated to buildings and improvements, easements, right-of-ways, land damages
- Enter date acquired, description, and total cost basis of buildings and improvements

  (NOTE: Buildings and improvements should be those attached to land entered in land description.)
- Estimate current inventory values

  (NOTE: Current land values should remain consistent over a specified time period.)

ASSIGNMENT SHEET #3

EXAMPLE

Present Plan ____ Alternative Plan ____

FORM 3.5

REAL ESTATE INVESTMENT AND DEPRECIATION RECORD

Tract No. ________ Date Acquired 1/77

Legal Description SW 1/4 Sec 20 T6N R19W IM

Other Description Farris home place - 160 acres

Original Basis Allocated to Land:

Purchase price, carry over basis, other (A) 52,500.00

Settlement fees (B) 5,000.00

Debt assumed (C) 22,500.00

Other (D) -0-

Total Original Basis (Add Lines A thru D) (E) 80,000.00

less portion of basis allocated to buildings and improvements (F) 18,800.00

less reductions in basis (G) –

Original Basis Allocated to Land (Line E minus F minus G) (H) 61,200.00

Date Acquired	ITEM DESCRIPTION (kind, size, location) Buildings & Improvements	Invest-ment Credit	Total Cost Basis	Life	Method	Annual Deprec. % or $	Deprec. Taken in Prior Years	Rem. Val. at Start of Year	End 19__		End 19__		ESTIMATED CURRENT VALUE		Line
									Deprec. This Year	Rem. Book Value	Deprec. This Year	Rem. Book Value	End 19 83	End 19__	
1/77	Cattle Shed		2800										840		1
1/77	Hay Barn		2800										840		2
1/77	Grain Bin		3600										1080		3
1/77	Machine Shed		2400										720		4
1/77	3 miles Barb Wire Fence		5400										2880		5
1/77	Well and Pump		1800										540		6
8/79	Pond		900										900		7
9/79	Terraces		750										750		8
															9
															10
	Total Bldg. & Improv.												8550		11
	Land		61200										120,000		12
	Total (11 + 12)												128550		13

ASSIGNMENT SHEET #3

Use the information below to complete the beginning inventory of real estate and buildings form on the following page.

January 1, 19____

Assume that you purchased an additional 80 acres on December 15, 1982, for a cash price of \$80,000. Settlement fees included a buyer's realtor fee of 6 percent or \$4,800. The legal land description is S$^1/_2$, SE$^1/_4$, SEC 20, T6N, R19W, IM. An appraiser listed the following improvements and values on the farm.

Item	Appraised value
Hay barn	\$3,600.00
Residence (will be rented)	\$16,000.00
Machine shed	\$4,400.00
Well and pump	\$1,500.00
Two miles of four-strand barbed wire that is about five years old (half life) and has a replacement cost of \$500 per quarter mile	\$2,000.00

ASSIGNMENT SHEET #3

FORM 3.5

REAL ESTATE INVESTMENT AND DEPRECIATION RECORD

Tract No. ________ Date Acquired ______________

Legal Description ____

____

Other Description ____

Original Basis Allocated to Land:

Purchase price, carry over basis, other (A) ____________

Settlement fees (B) ____________

Debt assumed (C) ____________

Other (D) ____________

Total Original Basis (Add Lines A thru D) (E) ____________

less portion of basis allocated to buildings and improvements (F) ____________

less reductions in basis (G) ____________

Original Basis Allocated to Land (Line E minus F minus G) (H) ____________

Date Acquired	ITEM DESCRIPTION (kind, size, location) Buildings & Improvements	Invest-ment Credit	Total Cost Basis	Life	Method	Annual Deprec. % or $	Deprec. Taken in Prior Years	Rem. Val. at Start of Year	End 19___		End 19___		ESTIMATED CURRENT VALUE		Line
									Deprec. This Year	Rem. Book Value	Deprec. This Year	Rem. Book Value	End 19___	End 19___	
															1
															2
															3
															4
															5
															6
															7
															8
															9
															10
	Total Bldg. & Improv.														11
	Land														12
	Total (11 + 12)														13

INVENTORY AND NET WORTH STATEMENT
UNIT III

ASSIGNMENT SHEET #4 — COMPLETE A BEGINNING INVENTORY OF LIVESTOCK

NAME ______________________________ SCORE ______________

A cooperator must develop a systematic approach for completing a beginning inventory of livestock on the farm. One approach is to use an inventory of livestock form. All livestock should be entered on this form, including purchased breeding animals.

The information below, and the sample completed beginning inventory of livestock form on the following page, outline the procedure for completing a beginning inventory of livestock.

- Group like kinds of livestock

  EXAMPLES: Beef, swine, dairy

- Group according to use

  EXAMPLES: Breeding, nonbreeding

- Group according to sex

  EXAMPLES: Cows, heifers, bulls, steers

- Enter total head for each line
- Estimate total weight and enter on appropriate line
- Estimate price per unit and enter on appropriate line

  (NOTE: Price may be per head or per hundredweight.)

- Estimate inventory value and enter on appropriate line
- Compute sums for breeding and nonbreeding; total for group of livestock

ASSIGNMENT SHEET #4

EXAMPLE

FORM 3.6

INVENTORY OF LIVESTOCK

LINE		START 19 87				END 19___				END 19___				END 19___				LINE
		No. Head	TOTAL WT.	Price Per Unit	TOTAL VALUE	No. Head	TOTAL WT.	Price Per Unit	TOTAL VALUE	No. Head	TOTAL WT.	Price Per Unit	TOTAL VALUE	No. Head	TOTAL WT.	Price Per Unit	TOTAL VALUE	
	SWINE																	
1	Purch. Breeding FORM 3.3																	1
2	Rsd. Breeding - Sows	25	8750	.40	3,500^{00}													2
3	- Gilts																	3
4	- Boars																	4
5	TOTAL BREEDING SWINE	25	8750		3,500^{00}													5
6	Hogs	56	11,480	.50	5,740^{00}													6
7	Pigs – Raised	195	3,900	20/hd	3,900^{00}													7
8	Purch. ~~Gilts~~ Pigs	320	28,200	.55	15,510^{00}													8
9	Barrows																	9
10	TOTAL NON-BRE[illegible]WINE	571	43,580		25,150^{00}													10
11	TOTAL SW[illegible]	596	52,330		28,650^{00}													11
	BEEF																	
12	Purch. Breed. FORM 3.3																	12
13	Rsd. Breeding - Cows																	13
14	- Heifers																	14
15	- Bulls																	15
16	TOTAL BREEDING BEEF																	16
17	Heifers																	17
18	Bulls																	18
19	Steers																	19
20	Calves																	20
21	TOTAL NON-BREED. BEEF																	21
22	TOTAL BEEF																	22
	DAIRY																	
23	Purch. Breeding FORM 3.3																	23
24	Rsd. Breeding - Cows																	24
25	Bred Heifers																	25
26	Open Heifers																	26
27	Bulls																	27
28	TOTAL BREEDING DAIRY																	28
29	Heifers																	29
30	Bulls																	30
31	Steers																	31
32	Calves																	32
33	TOTAL NON-BREED. DAIRY																	33
34	TOTAL DAIRY																	34
	OTHER																	
35	TOTAL BREEDING																	35
36																		36
37	TOTAL NON-BREEDING																	37
	TOTAL OTHER																	
	FORM TOTAL																	

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ASSIGNMENT SHEET #4

Use the information below to complete the inventory of livestock form on the following page.

January 1, 19____ Beef Enterprise

50 head of purchased breeding livestock weighing 45,000 pounds and valued at $17,500 on form for inventory of purchased breeding livestock

50 head of raised breeding cows weighing 45,000 pounds and valued at $37/cwt, based on current market price less selling expenses

11 head of raised replacement heifers weighing 7,700 pounds and valued at $50/cwt, based on current market price less selling expenses

5 head of raised breeding bulls weighing 6,500 pounds and valued at $50/cwt, based on current market price less selling expenses

22 head raised heifers weighing 500 pounds each and valued at $50/cwt, based on current market price less selling expenses

38 head raised steers weighing 550 pounds each and valued at $60/cwt, based on current market price less selling expenses

110 head steers purchased for resale weighing 400 pounds each and purchased at a cost of $300 each

27 head 200-pound calves still on cows, and valued at $150/head, based on current market price less selling expenses

ASSIGNMENT SHEET #4

FORM 3.6 **INVENTORY OF LIVESTOCK**

LINE		START 19___				END 19___				END 19___				END 19___				LINE
		No. Head	TOTAL WT.	Price Per Unit	TOTAL VALUE	No. Head	TOTAL WT.	Price Per Unit	TOTAL VALUE	No. Head	TOTAL WT.	Price Per Unit	TOTAL VALUE	No. Head	TOTAL WT.	Price Per Unit	TOTAL VALUE	
	SWINE																	
1	Purch. Breeding FORM 3.3																	1
2	Rsd. Breeding - Sows																	2
3	- Gilts																	3
4	- Boars																	4
5	TOTAL BREEDING SWINE																	5
6	Hogs																	6
7	Pigs																	7
8	Gilts																	8
9	Barrows																	9
10	TOTAL NON-BREED. SWINE																	10
11	TOTAL SWINE																	11
	BEEF																	
12	Purch. Breed. FORM 3.3																	12
13	Rsd. Breeding - Cows																	13
14	- Heifers																	14
15	- Bulls																	15
16	TOTAL BREEDING BEEF																	16
17	Heifers																	17
18	Bulls																	18
19	Steers																	19
20	Calves																	20
21	TOTAL NON-BREED. BEEF																	21
22	TOTAL BEEF																	22
	DAIRY																	
23	Purch. Breeding FORM 3.3																	23
24	Rsd. Breeding - Cows																	24
25	Bred Heifers																	25
26	Open Heifers																	26
27	Bulls																	27
28	TOTAL BREEDING DAIRY																	28
29	Heifers																	29
30	Bulls																	30
31	Steers																	31
32	Calves																	32
33	TOTAL NON-BREED. DAIRY																	33
34	TOTAL DAIRY																	34
	OTHER																	
35	TOTAL BREEDING																	35
36																		36
37	TOTAL NON-BREEDING																	37
38	TOTAL OTHER																	38
39	FORM TOTAL																	39

INVENTORY AND NET WORTH STATEMENT
UNIT III

ASSIGNMENT SHEET #5 — COMPLETE A BEGINNING INVENTORY OF FEED, STORED AND GROWING CROPS, AND SUPPLIES

NAME ______________________________ SCORE ____________

To complete a beginning inventory of all owned assets, it is important to include an inventory of feed, stored and growing crops, and supplies. A cooperator must develop a systematic approach to inventory these items as some may be easily overlooked. Common problem areas include estimating amount of stored crops (wheat in grain bin, hay in barn), estimating production costs for growing crops, and estimating amount of stored supplies (seed, fuel.)

Look at the sample completed beginning inventory of feed, stored and growing crops, and supplies form on the next page, then use the information below to complete the beginning inventory of feed, stored and growing crops, and supplies form that follows the example.

January 1, 19____

5 tons of purchased cattle cubes at $160/ton

Salt and mineral blocks totaling $50

87,600 pounds of purchased alfalfa hay to be fed to cattle at $75/ton

11,500 bushels of raised wheat at $3.50/bushel

8 tons of raised wheat hay at $40/ton

1,400 acres of growing wheat; production costs estimated at $40/acre

100 bushels of seed wheat at $4.50/bushel

500 gallons of diesel fuel at $1.10/gallon

Numerous pieces of shop equipment and supplies totaling $1,650

EXAMPLES: Welding electrodes, bolts and nuts, small hand-tools

Machinery and equipment not included in machinery and equipment depreciation schedule; inventory as supplies totaling $2,025.

EXAMPLES: Wire roller, hydraulic cylinders, fence chargers, three-point subsoiler

(NOTE: All items were valued at $150 or less.)

ASSIGNMENT SHEET #5

EXAMPLE

FORM 3.7

INVENTORY OF FEED, STORED & GROWING CROPS AND CROP & LIVESTOCK SUPPLIES

LINE		START 1984			END 19__			END 19__			END 19__			LINE
		QUANT.	PRICE PER UNIT	TOTAL VALUE	QUANT.	PRICE PER UNIT	TOTAL VALUE	QUANT.	PRICE PER UNIT	TOTAL VALUE	QUANT.	PRICE PER UNIT	TOTAL VALUE	
	PURCHASED FEEDS													
1	Purchased Feeds	6 tons	$200/T	1,200.00										1
2	Supplement & Minerals													2
3														3
4														4
5	**TOTAL PURCHASED FEEDS**			1,200.00										5
	STORED CROPS													
6	Wheat	1,200 bu	3.55/bu	4260.00										6
7	Grain Sorghum													7
8	Soybeans	2500 bu	5.50/bu	13,750.00										8
9	Cotton													9
10														10
11	Silage													11
12														12
13	Hay													13
14														14
15	Straw													15
16	**TOTAL STORED CROPS**	3,700 bu		18,010.00										16
	GROWING CROPS($invested)													
17	Wheat	200 AC.	50/AC	10,000.00										17
18														18
19	**TOTAL GROWING CROPS**	200 AC.		10,000.00										19
	SUPPLIES													
20	Seeds													20
21														21
22	Fertilizer Stored													22
23														23
24	Chemicals													24
25														25
26	Twine, Etc.													26
27	Fuel	230 gal	1.10/gal	253.00										27
28														28
29	Oil	13 gal.	4.00/gal	52.00										29
30	Grease													30
31	Vet Supplies			30.00										31
32	Small Hand Tools			500.00										32
33	Bedding													33
34	Other Supplies													34
35	**TOTAL SUPPLIES**			835.00										35
	OTHER													
36														36
37														37
38	**TOTAL OTHER**			-0-										38
39	**FORM TOTAL**			30,045.00										39

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ASSIGNMENT SHEET #5

FORM 3.7 **INVENTORY OF FEED, STORED & GROWING CROPS AND CROP & LIVESTOCK SUPPLIES**

LINE		START 19___			END 19___			END 19___			END 19___			LINE
		QUANT.	PRICE PER UNIT	TOTAL VALUE	QUANT.	PRICE PER UNIT	TOTAL VALUE	QUANT.	PRICE PER UNIT	TOTAL VALUE	QUANT.	PRICE PER UNIT	TOTAL VALUE	
	PURCHASED FEEDS													
1	Purchased Feeds													1
2	Supplement & Minerals													2
3														3
4														4
5	**TOTAL PURCHASED FEEDS**													5
	STORED CROPS													
6	Wheat													6
7	Grain Sorghum													7
8	Soybeans													8
9	Cotton													9
10														10
11	Silage													11
12														12
13	Hay													13
14														14
15	Straw													15
16	**TOTAL STORED CROPS**													16
	GROWING CROPS($invested)													
17														17
18														18
19	**TOTAL GROWING CROPS**													19
	SUPPLIES													
20	Seeds													20
21														21
22	Fertilizer Stored													22
23														23
24	Chemicals													24
25														25
26	Twine, Etc.													26
27	Fuel													27
28														28
29	Oil													29
30	Grease													30
31	Vet Supplies													31
32														32
33	Bedding													33
34	Other Supplies													34
35	**TOTAL SUPPLIES**													35
	OTHER													
36														36
37														37
38	**TOTAL OTHER**													38
39	**FORM TOTAL**													39

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INVENTORY AND NET WORTH STATEMENT
UNIT III

ASSIGNMENT SHEET #6 — COMPLETE A BEGINNING INVENTORY OF RECEIVABLES AND PAYABLES

NAME ______________________________ SCORE ______________

One of the most difficult tasks of starting a record-book system is obtaining accurate and complete beginning balances for accounts receivable and payable. Beginning balances are extremely important so that accurate credit records may be kept and a complete and accurate beginning net worth statement may be computed.

This assignment sheet contains several examples of forms used to enter beginning credit balances.

PART I

Use the information provided below to complete the open accounts receivable form on the next page.

On January 1, 19____, Keith Harp, a local dairyman, owes you $560 for 8 tons of alfalfa hay at $70/ton. You have been selling the alfalfa hay to Keith payable within sixty days after the hay leaves your barn.

ASSIGNMENT SHEET #6

FORM 4.1 PAGE

OPEN ACCOUNTS RECEIVABLE

BORROWER ____________________

PURPOSE ____________________

TERMS ____________________

DATE	ADDED TO ACCOUNT	PAYMENTS			UNPAID PRINCIPAL BALANCE
		TOTAL	INTEREST	PRINCIPAL	
	1	2	3	4	5

BORROWER ____________________

PURPOSE ____________________

TERMS ____________________

DATE	ADDED TO ACCOUNT	PAYMENTS			UNPAID PRINCIPAL BALANCE
		TOTAL	INTEREST	PRINCIPAL	
	1	2	3	4	5

ASSIGNMENT SHEET #6

PART II

Use the information provided below to complete the open accounts payable form on the next page.

On January 1, 19____, you still owe James's Feed and Seed for 2 tons of cattle cubes purchased December 15, at $160/ton. You have a thirty-day open account.

ASSIGNMENT SHEET #6

FORM 4.3 **PAGE** **OPEN ACCOUNTS PAYABLE**

CREDITOR ______________________
PURPOSE ______________________
TERMS ______________________

DATE	ADDED TO ACCOUNT	PAYMENTS			UNPAID PRINCIPAL BALANCE
		TOTAL	INTEREST	PRINCIPAL	
	1	2	3	4	5

CREDITOR ______________________
PURPOSE ______________________
TERMS ______________________

DATE	ADDED TO ACCOUNT	PAYMENTS			UNPAID PRINCIPAL BALANCE
		TOTAL	INTEREST	PRINCIPAL	
	1	2	3	4	5

ASSIGNMENT SHEET #6

PART III

Use the information provided below to complete the credit line and short-term multipayment notes form on the next page.

On January 1, 19____, your operating note credit line with the High Plains PCA has a balance of $92,890. The note is renewable annually on June 1. On January 1, 19____, you had accrued $8,730 interest due.

ASSIGNMENT SHEET #6

CREDIT LINES AND SHORT TERM MULTIPAYMENT NOTES

FORM 4.5 **PAGE**

CREDITOR ____________________

PURPOSE ____________________

TERMS ____________________

DATE	ADDITIONAL BORROWINGS FORM 1.5 COL. 20	PAYMENTS			UNPAID PRINCIPAL BALANCE
		TOTAL FORM 2.1	INTEREST FORM 2.1 COL. 27	PRINCIPAL FORM 2.5 COL. 50	
	1	2	3	4	5

CREDITOR ____________________

PURPOSE ____________________

TERMS ____________________

DATE	ADDITIONAL BORROWINGS FORM 1.5 COL. 20	PAYMENTS			UNPAID PRINCIPAL BALANCE
		TOTAL FORM 2.1	INTEREST FORM 2.1 COL. 27	PRINCIPAL FORM 2.5 COL. 50	
	1	2	3	4	5

ASSIGNMENT SHEET #6

PART IV

Using the information provided on the intermediate and long-term multipayment note and mortgage record on the next page, answer the following questions.

A. What is the beginning principal balance on January 1, 1984? ____________________

B. What is the accrued interest due on January 1, 1984? ____________________

C. What is the beginning principal balance on January 1, 1986? ____________________

D. What is the accrued interest due on January 1, 1986? ____________________

(NOTE: Assume that all note payments are paid on June 30, each year, and that the note is current.)

ASSIGNMENT SHEET #6

FORM 4.6 **PAGE** **INTERMEDIATE AND LONG TERM MULTIPAYMENT NOTE AND MORTGAGE RECORD**

CREDITOR Prudential Life Insurance Co.

PURPOSE 160 acres

TERMS Constant principal-#3,600.00, 9% interest, Balloon payment 6/90 of $74,000.00

REPAYMENT SCHEDULE				REPAYMENT RECORD				
DATE	TOTAL	INTEREST	PRINCIPAL	DATE	TOTAL FORM 2.1	INTEREST FORM 2.1 COL. 27	PRINCIPAL FORM 2.5 COL. 50	UNPAID PRINCIPAL BALANCE
6/83	12,582.00	9252.00	3,600.00	6/30/83	12,582.00	9,252.00	3,600.00	99,200.00
6/84	12,528.00	8,928.00	3,600.00					95,600.00
6/85	12,204.00	8,604.00	3,600.00					92,000.00
6/86	11,880.00	8,280.00	3,600.00					88,400.00
6/87	11,556.00	7,956.00	3,600.00					84,800.00
6/88	11,232.00	7,632.00	3,600.00					81,200.00
6/89	10,908.00	7,308.00	3,600.00					77,600.00
6/90	10,584.00	6,984.00	3,600.00					74,000.00
	1	2	3		4	5	6	7

INVENTORY AND NET WORTH STATEMENT
UNIT III

ASSIGNMENT SHEET #7 — INTERPRET A COMPLETED NET WORTH STATEMENT

NAME ______________________________ SCORE ______________

The purpose of this assignment sheet is to familiarize the cooperator with a net worth statement and the financial ratios associated with the statement.

PART I

Using the information on the following net worth statement, calculate the current ratio, working asset ratio, net capital ratio (farm), net capital ratio (farm and nonfarm), debt-to-equity ratio, and percent equity. Write your answers in the blanks provided on the form.

ASSIGNMENT SHEET #7

FORM 6.3 DATE: NET WORTH STATEMENT: FARM AND NON-FARM ASSETS 19____

LINE	NON-FARM ASSETS	BOOK VALUE			CURRENT VALUE		
		BEGINNING	ENDING	NET CHANGE (2-1)	BEGINNING	ENDING	NET CHANGE (5-4)
1	Family Bank Balance	$	$	$	$ 295.00	$	$
2	Savings				1,500.00		
3	Stocks and Bonds (present value)						
4	Accounts and Notes Receivable						
5	Life Insurance (cash value)				3,500.00		
6	TOTAL NON-FARM CURRENT ASSETS (add 1 thru 5)				5,295.00		
7	Auto and other Vehicles (family share)				4,500.00		
8	Household and Other				5,000.00		
9	Boat, Camper, Etc.						
10	Non-Farm Real Estate				80,000.00		
11	TOTAL NON-FARM ASSETS (add 6 thru 10)				94,795.00		
	FARM ASSETS						
12	Cash in Farm Account	$	$	$	$ 2,135.00	$	$
13	Farm Accounts Receivable (forms 4.1 + 4.2)						
14	Swine, non-breeding (form 3.6 line 10)						
15	Beef, non-breeding (form 3.6 line 21)				97,200.00		
16	Dairy, non-breeding (form 3.6 line 33)						
17	Other, non-breeding (form 3.6 line 37)						
18	Purchased Feeds (form 3.7 line 5)				4,135.00		
19	Stored Crops (form 3.7 line 16)				65,675.00		
20	Growing Crops (form 3.7 line 19)				56,000.00		
21	Supplies (form 3.7 line 35)				3,885.00		
22	Other Current Assets (form 3.7 line 38)						
23	TOTAL FARM CURRENT ASSETS (add 12 thru 22)				229,030.00		
24	Swine, breeding (form 3.6 line 5)						
25	Beef, breeding (form 3.6 line 16)				114,600.00		
26	Dairy, breeding (form 3.6 line 28)						
27	Other, breeding (form 3.6 line 35)				1,500.00		
28	Farm Accounts Receivable (forms 4.1 + 4.2)						
29	Machinery and Equipment (form 3.2)				280,290.00		
30	TOTAL FARM INTERMEDIATE ASSETS (add 24 thru 29)				396,390.00		
31	Buildings (form 3.5)				108,100.00		
32	Land (form 3.5)				605,430.00		
33	TOTAL FARM LONG TERM ASSETS (add 31 + 32)				713,530.00		
34	TOTAL FARM ASSETS (add 23 + 30 + 33)				1,338,970.00		
35	TOTAL ASSETS (add 11 + 34)				1,433,765.00		
	FINANCIAL RATIOS						
A	CURRENT RATIO (FARM) = Current Assets (form 6.3 line 23) / Current Liabilities (form 6.4 line 58)						
B	WORKING ASSET RATIO (FARM) = Current + Intermediate Assets (form 6.3 lines 23 + 30) / Current + Intermediate Liabilities (form 6.4 lines 58 + 62)						
C	NET CAPITAL RATIO (FARM) = Total Farm Assets (form 6.3 line 34) / Total Farm Liabilities (form 6.4 line 67)						
	COLUMN	1	2	3	4	5	6

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ASSIGNMENT SHEET #7

FORM 6.4 DATE: **NET WORTH STATEMENT: FARM AND NON-FARM LIABILITIES 19____**

LINE	NON-FARM LIABILITIES	BOOK VALUE			CURRENT VALUE		
		BEGINNING	ENDING	NET CHANGE (8-7)	BEGINNING	ENDING	NET CHANGE (11-10)
36	Charge Accounts	$	$	$	$ 410.00	$	$
37	Notes, portion due next year						
38	Mortgages, due next year						
39	Accrued interest on non-farm liabilities						
40	TOTAL NON-FARM CURRENT LIABILITIES (add 36-39)				410.00		
41	Notes, portion due after next year						
42							
43	Mortgages, portion due after next year						
44							
45	TOTAL NON-FARM LIABILITIES (add 40 thru 44)				410.00		
46	NON-FARM NET WORTH (line 11 minus line 45)				410.00		
	FARM LIABILITIES						
47	Short Term Farm Notes Payable (form 4.4)	$	$	$	$ 117,825.00	$	$
48							
49							
50	Accounts Payable (form 4.3)				7,000.00		
51							
52							
53	Credit Lines and Short Term Multipayt. Notes (form 4.5)						
54	Intermed. & Long Term Notes Due Next Year (form 4.6)				49,350.00		
55					26,660.00		
56	Accrued Liabilities (taxes, rent, etc.) (form 4.3)				4,159.00		
57	Accrued Interest (form 4.3 thru 4.6)				21,471.00		
58	TOTAL FARM CURRENT LIABILITIES (add 47 thru 57)				226,665.00		
59	Intermed. Term Debt Due After Next Year (form 4.6)				160,940.00		
60							
61							
62	TOTAL FARM INTERMEDIATE LIABILITIES (add 59-61)				160,940.00		
63	Long Term Debt Due After Next Year (form 4.6)				317,620.00		
64							
65							
66	TOTAL FARM LONG TERM LIABILITIES (add 63-65)				317,620.00		
67	TOTAL FARM LIABILITIES (add 58 + 62 + 66)				705,225.00		
68	TOTAL FARM NET WORTH (line 34 minus 67)				633,745.00		
69	TOTAL LIABILITIES (add 45 + 67)				705,635.00		
70	TOTAL NET WORTH (line 35 minus 69)				723,130.00		
	FINANCIAL RATIOS						
D	NET CAPITAL RATIO (FARM & NON-FARM) = Total Assets (form 6.3 line 35) / Total Liabilities (form 6.4 line 69)						
E	DEBT EQUITY RATIO = Total Liabilities (form 6.4 line 69) / Net Worth (form 6.4 line 70)						
F	PERCENT EQUITY = Net Worth (form 6.4 line 70) / Total Assets (form 6.3 line 35) X 100	%	%		%	%	
COLUMN		7	8	9	10	11	12

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ASSIGNMENT SHEET #7

PART II

Interpret the ratios calculated in Part I. Write your answers in the space provided.

A. Current ratio (farm) — ____________________

Comments: ____

____

____

B. Working asset ratio (farm) — ____________________

Comments: ____

____

____

C. Net capital ratio (farm) — ____________________

Comments: ____

____

____

D. Debt/equity ratio — ____________________

Comments: ____

____

____

E. Percent equity — ____________________

Comments: ____

____

____

INVENTORY AND NET WORTH STATEMENT
UNIT III

ASSIGNMENT SHEET #8 — USE A BEGINNING-OF-THE-YEAR CHECKLIST

NAME ______________________________________ SCORE ________________

To avoid many year-end closing problems, it is important that the cooperator start each year with the correct balances and inventory in the new record book.

Use the following checklist to help avoid year-end problems. Write the date completed in the "yes" box. Write an "X" in the appropriate "no" box if item is not completed.

(NOTE: Sections and form numbers are referenced to the *Oklahoma Young Farmer Record Book*.)

	YES	NO
Beginning inventory (Section 3) (NOTE: Transfer totals from previous year's ending inventory.)		
Beginning depreciation schedule (Section 3) (NOTE: Forward information from previous year's depreciation schedule.)		
Beginning credit records (Section 4) Beginning loan balances (NOTE: Forward ending loan balances, unpaid bills, open accounts, and accrued interest from previous year's ending balances.)		
Beginning accounts receivable balances (NOTE: Forward accounts receivable, accrued interest, and savings account balances from previous year's ending balances.)		
Beginning cash balance on Cash Flow Summary (Form 6.1) (NOTE: Forward from ending cash balance on Form 6.2 from the previous year.)		
Beginning Net Worth Statement (Forms 6.3 and 6.4) (NOTE: Forward amounts from previous year's ending net worth statement.)		
If applicable, forward previous year's ending balance for family living to Family-Living Summary (Section 5)		

Date checklist completed ________________________ 19_____

INVENTORY AND NET WORTH STATEMENT
UNIT III

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheets #1-#8 — See following pages

ANSWERS TO ASSIGNMENT SHEET #1

FORM 3.1 **PAGE** **DEPRECIATION SCHEDULE:** ____________ **MACHINERY AND EQUIPMENT**

LINE	DATE ACQUIRED	ITEM DESCRIPTION KIND OF MACHINE MAKE MODEL SIZE	ID NO	NEW OR USED	INVEST CREDIT	COST INFORMATION			ADDIT'L FIRST YEAR DEPREC	SALVAGE VALUE	DEPRECIATION INFORMATION					LINE
						REM'NG BOOK VALUE OF TRADE IN	CASH DIFF PAID	TOTAL COST BASIS			BALANCE FOR REGULAR DEPREC	LIFE	METHOD	ANNUAL DEPREC % or $	DEPREC TAKEN IN PRIOR YEARS	
1	12/79	20 ft. cattle Feeder														1
2	3/80	Portable Corral														2
3	12/80	Odessey for cattle														3
4	6/81	Versatile Tractor														4
5	9/81	Big Ox Plow														5
6	1/82	8-Row Cultivator														6
7																7
8																8
9																9
10																10
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	

FORM 3.2 **PAGE** **DEPRECIATION SCHEDULE:** ____________ **MACHINERY AND EQUIPMENT (CONT'D)**

LINE	START 19___	END 19___		END 19___		END 19___		ESTIMATED CURRENT CASH VALUE			
	REMAINING BK VAL AT START OF YEAR	DEPREC THIS YEAR	REMAINING BOOK VALUE	DEPREC THIS YEAR	REMAINING BOOK VALUE	DEPREC THIS YEAR	REMAINING BOOK VALUE	START 19___	END 19___	END 19___	END 19___
1								500.00			
2								1100.00			
3								995.00			
4								40,000.00			
5								950.00			
6								3,600.00			
7											
24											
25							TOTALS	47,145.00			
	16	17	18	19	20	21	22	23	24	25	26

ANSWERS TO ASSIGNMENT SHEET #2

FORM 3.3 **PAGE** **DEPRECIATION SCHEDULE** ______________ **LIVESTOCK FOR BREEDING**

						PER HEAD DATA						START OF 19					END OF				
												Per Head		Head	Per Lot		Per Head		Head		
LINE	Date Acquired	Item Description	Head in Lot When Acq	Investment Credit	New or Used	Cost Basis	Salvage Value	Balance for Deprec	Life	Method	Annual Deprec % or $	Deprec in Prior Years	Remaining Book Value	On Hand	Deprec in Prior Years	Remaining Book Value	Deprec This Year	Remaining Book Value	Sold or Died	On Hand	LINE
1	1/1/83	Yorkshire Sows												10							1
2	1/1/83	Hampshire Boar												1							2
3	3/80	Hereford Cows												50							3
4																					4
5																					5
6																					6
7																					7
8																					8
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	

FORM 3.4 **PAGE** **DEPRECIATION SCHEDULE** ______________ **LIVESTOCK FOR BREEDING (CONT'D)**

	19		END OF 19						END OF 19						ESTIMATED CURRENT CASH VALUE				
	Per Lot		Per Head		Head		Per Lot		Per Head		Head		Per Lot		Per Lot				
LINE	Deprec This Year	Remaining Book Value	Deprec This Year	Remaining Book Value	Sold or Died	On Hand	Deprec This Year	Remaining Book Value	Deprec This Year	Remaining Book Value	Sold or Died	On Hand	Deprec This Year	Remaining Book Value	Start 19	End 19	End 19	End 19	LINE
1															2,250^{00}				1
2															562^{50}				2
3															19,500^{00}				3
4																			4
5																			5
6																			6
7																			7
24																			24
25															22,312^{50}				25
	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	

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ANSWERS TO ASSIGNMENT SHEET #3

FORM 3.5 **REAL ESTATE INVESTMENT AND DEPRECIATION RECORD**

Tract No. ________ Date Acquired 12/82

Legal Description S 1/2 SE 1/4 SEC 20 T6N R 19W IM

Other Description 80 Acres

Original Basis Allocated to Land:

Purchase price, carry over basis, other (A) 80,000.00

Settlement fees (B) 4,800.00

Debt assumed (C) ________

Other (D) ________

Total Original Basis (Add Lines A thru D) (E) 84,800.00

less portion of basis allocated to buildings and improvements (F) 27,500.00

less reductions in basis (G) —

Original Basis Allocated to Land (Line E minus F minus G) (H) 57,300.00

Date Acquired	ITEM DESCRIPTION (kind, size, location) Buildings & Improvements	Invest-ment Credit	Total Cost Basis	Life	Method	Annual Deprec % or $	Deprec. Taken in Prior Years	Rem. Val. at Start of Year	End 19__		End 19__		ESTIMATED CURRENT VALUE		Line
									Deprec. This Year	Rem. Book Value	Deprec. This Year	Rem. Book Value	End 19__	End 19__	
12/82	Residence - Rent House		16,000										16,000		1
12/82	Hay Barn		3600										3,600		2
12/82	Machine Shed		4,400										4,400		3
12/82	Well and Pump		1,500										1,500		4
12/82	2miles 4-strand barb wire fence		2,000										2,000		5
															6
															7
															8
															9
															10
	Total Bldg. & Improv.												27,500		11
	Land		57,300										57,300		12
	Total (11 + 12)												84,800		13

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ANSWERS TO ASSIGNMENT SHEET #4

FORM 3.6 **INVENTORY OF LIVESTOCK**

LINE		START 19__				END 19__				END 19__				END 19__				LINE
		No. Head	TOTAL WT.	Price Per Unit	TOTAL VALUE	No. Head	TOTAL WT.	Price Per Unit	TOTAL VALUE	No. Head	TOTAL WT.	Price Per Unit	TOTAL VALUE	No. Head	TOTAL WT.	Price Per Unit	TOTAL VALUE	
	SWINE																	
1	Purch. Breeding FORM 3.3																	1
2	Rsd. Breeding - Sows																	2
3	- Gilts																	3
4	- Boars																	4
5	**TOTAL BREEDING SWINE**																	5
6	Hogs																	6
7	Pigs																	7
8	Gilts																	8
9	Barrows																	9
10	**TOTAL NON-BREED. SWINE**																	10
11	**TOTAL SWINE**																	11
	BEEF																	
12	Purch. Breed. FORM 3.3	50	45,000		17,500													12
13	Rsd. Breeding - Cows	50	45,000	.37	16,650													13
14	- Heifers	11	7,700	.50	3,850													14
15	- Bulls	5	6,500	.50	3,250													15
16	**TOTAL BREEDING BEEF**	116	104,200		41,250													16
17	Heifers	22	11,000	.50	5,500													17
18	Raised ~~Bulls~~ Steers	38	20,900	.60	12,540													18
19	Purch. Steers	110	44,000	300/.80	33,000													19
20	Calves	27	5,400	150/.40	4,050													20
21	**TOTAL NON-BREED. BEEF**	197	81,300		55,090													21
22	**TOTAL BEEF**	313	185,500		96,340													22
	DAIRY																	
23	Purch. Breeding FORM 3.3																	23
24	Rsd. Breeding - Cows																	24
25	Bred Heifers																	25
26	Open Heifers																	26
27	Bulls																	27
28	**TOTAL BREEDING DAIRY**																	28
29	Heifers																	29
30	Bulls																	30
31	Steers																	31
32	Calves																	32
33	**TOTAL NON-BREED. DAIRY**																	33
34	**TOTAL DAIRY**																	34
	OTHER																	
35	TOTAL BREEDING																	35
36																		36
37	TOTAL NON-BREEDING																	37
38	**TOTAL OTHER**																	38
39	**FORM TOTAL**																	39

ANSWERS TO ASSIGNMENT SHEET #5

FORM 3.7 **INVENTORY OF FEED, STORED & GROWING CROPS AND CROP & LIVESTOCK SUPPLIES**

LINE		START 19			END 19			END 19			END 19			LINE
		QUANT	PRICE PER UNIT	TOTAL VALUE	QUANT.	PRICE PER UNIT	TOTAL VALUE	QUANT	PRICE PER UNIT	TOTAL VALUE	QUANT	PRICE PER UNIT	TOTAL VALUE	
	PURCHASED FEEDS													
1	Purchased Feeds - cubes	5 ton	160/TON	800										1
2	Supplement & Minerals			50										2
3	Purch Alfalfa Hay	43.8 ton	75/TON	3285										3
4														4
5	**TOTAL PURCHASED FEEDS**			4135										5
	STORED CROPS													
6	Wheat	11,500 bu.	3^{50}/bu	40,250										6
7	Grain Sorghum													7
8	Soybeans													8
9	Cotton													9
10														10
11	Silage													11
12														12
13	Hay													13
14	Hay - Wheat	8 ton	40/TON	320										14
15	Straw													15
16	**TOTAL STORED CROPS**			40,570										16
	GROWING CROPS($invested)													
17	Wheat	1400 AC	40/AC	56,000										17
18														18
19	**TOTAL GROWING CROPS**			56,000										19
	SUPPLIES													
20	Seeds - Wheat	100 bu.	4.50/bu.	450										20
21														21
22	Fertilizer Stored													22
23														23
24	Chemicals													24
25														25
26	Twine, Etc.													26
27	Fuel - Diesel	500 gal	1^{10}/gal	550										27
28														28
29	Oil													29
30	Grease													30
31	Vet Supplies													31
32	Shop Equipment			1650										32
33	Bedding													33
34	Other Supplies													34
35	**TOTAL SUPPLIES**			2650										35
	OTHER													
36	Mach. & Equip. (not on deprec sch.)			2025										36
37														37
38	**TOTAL OTHER**			2025										38
39	**FORM TOTAL**			105,380										39

ANSWERS TO ASSIGNMENT SHEET #6—Part I

FORM 4.1 **PAGE** **OPEN ACCOUNTS RECEIVABLE**

BORROWER Keith Harp
PURPOSE Alfalfa Hay
TERMS Pay within 60 days

DATE	ADDED TO ACCOUNT	PAYMENTS			UNPAID PRINCIPAL BALANCE
		TOTAL	INTEREST	PRINCIPAL	
1/1	Beginning balance				560.00
	1	2	3	4	5

BORROWER
PURPOSE
TERMS

DATE	ADDED TO ACCOUNT	PAYMENTS			UNPAID PRINCIPAL BALANCE
		TOTAL	INTEREST	PRINCIPAL	
	1	2	3	4	5

ANSWERS TO ASSIGNMENT SHEET #6—Part II

FORM 4.3 **PAGE** **OPEN ACCOUNTS PAYABLE**

CREDITOR Jamee's Feed and Seed
PURPOSE Feed Acct.
TERMS 30 day Open Account

DATE	ADDED TO ACCOUNT	PAYMENTS			UNPAID PRINCIPAL BALANCE
		TOTAL	INTEREST	PRINCIPAL	
1/1	Beginning Balance				320^{00}
	1	2	3	4	5

CREDITOR
PURPOSE
TERMS

DATE	ADDED TO ACCOUNT	PAYMENTS			UNPAID PRINCIPAL BALANCE
		TOTAL	INTEREST	PRINCIPAL	
	1	2	3	4	5

ANSWERS TO ASSIGNMENT SHEET #6—Part III

FORM 4.5 **PAGE**

CREDIT LINES AND SHORT TERM MULTIPAYMENT NOTES

CREDITOR High Plains PCA
PURPOSE Operating Note
TERMS Renewable annually, June 1

DATE	ADDITIONAL BORROWINGS FORM 1.5 COL. 20	PAYMENTS			UNPAID PRINCIPAL BALANCE
		TOTAL FORM 2.1	INTEREST FORM 2.1 COL. 27	PRINCIPAL FORM 2.5 COL. 50	
1/1	Beginning Balance				92,890.00
1/1	Accrued Interest		8,730.00	—	92,890.00
	1	2	3	4	5

CREDITOR
PURPOSE
TERMS

DATE	ADDITIONAL BORROWINGS FORM 1.5 COL. 20	PAYMENTS			UNPAID PRINCIPAL BALANCE
		TOTAL FORM 2.1	INTEREST FORM 2.1 COL. 27	PRINCIPAL FORM 2.5 COL. 50	
	1	2	3	4	5

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #6

PART IV

A. $99,200

B. $4,464

C. $92,000

D. $4,140

ANSWERS TO ASSIGNMENT SHEET #7—Part I

FORM 6.3 DATE: NET WORTH STATEMENT: FARM AND NON-FARM ASSETS 19____

LINE	NON-FARM ASSETS	BOOK VALUE			CURRENT VALUE		
		BEGINNING	ENDING	NETCHANGE (2-1)	BEGINNING	ENDING	NETCHANGE (5-4)
1	Family Bank Balance	$	$	$	$ 295.00	$	$
2	Savings				1,500.00		
3	Stocks and Bonds (present value)						
4	Accounts and Notes Receivable						
5	Life Insurance (cash value)				3,500.00		
6	TOTAL NON-FARM CURRENT ASSETS (add 1 thru 5)				5,295.00		
7	Auto and other Vehicles (family share)				4,500.00		
8	Household and Other				5,000.00		
9	Boat, Camper, Etc						
10	Non-Farm Real Estate – Home				80,000.00		
11	TOTAL NON-FARM ASSETS (add 6 thru 10)				94,795.00		
	FARM ASSETS						
12	Cash in Farm Account	$	$	$	$ 2,155.00	$	$
13	Farm Accounts Receivable (forms 4.1 + 4.2)						
14	Swine, non-breeding (form 3.6 line 10)						
15	Beef, non-breeding (form 3.6 line 21)				97,200.00		
16	Dairy, non-breeding (form 3.6 line 33)						
17	Other, non-breeding (form 3.6 line 37)						
18	Purchased Feeds (form 3.7 line 5)				4,135.00		
19	Stored Crops (form 3.7 line 16)				65,675.00		
20	Growing Crops (form 3.7 line 19)				56,000.00		
21	Supplies (form 3.7 line 35)				3,885.00		
22	Other Current Assets (form 3.7 line 38)						
23	TOTAL FARM CURRENT ASSETS (add 12 thru 22)				229,050.00		
24	Swine, breeding (form 3.6 line 5)						
25	Beef, breeding (form 3.6 line 16)				114,600.00		
26	Dairy, breeding (form 3.6 line 28)						
27	Other, breeding (form 3.6 line 35)				1,500.00		
28	Farm Accounts Receivable (forms 4.1 + 4.2)						
29	Machinery and Equipment (form 3.2)				280,290.00		
30	TOTAL FARM INTERMEDIATE ASSETS (add 24 thru 29)				396,390.00		
31	Buildings (form 3.5)				108,100.00		
32	Land (form 3.5)				605,430.00		
33	TOTAL FARM LONG TERM ASSETS (add 31 + 32)				713,530.00		
34	TOTAL FARM ASSETS (add 23 + 30 + 33)				1,338,970.00		
35	TOTAL ASSETS (add 11 + 34)				1,433,765.00		
	FINANCIAL RATIOS						
A	CURRENT RATIO (FARM) Current Assets (form 6.3 line 23) / Current Liabilities (form 6.4 line 58)				1.01:1		
B	WORKING ASSET RATIO (FARM) Current + Intermediate Assets (form 6.3 lines 23 + 30) / Current + Intermediate Liabilities (form 6.4 lines 58 + 62)				1.61:1		
C	NET CAPITAL RATIO (FARM) Total Farm Assets (form 6.3 line 34) / Total Farm Liabilities (form 6.4 line 67)				1.90:1		
	COLUMN	1	2	3	4	5	6

ANSWERS TO ASSIGNMENT SHEET #7—Part I

FORM 6.4 DATE: **NET WORTH STATEMENT: FARM AND NON-FARM LIABILITIES 19____**

LINE	NON-FARM LIABILITIES	BOOK VALUE			CURRENT VALUE		
		BEGINNING	ENDING	NET CHANGE (8-7)	BEGINNING	ENDING	NET CHANGE (11-10)
36	Charge Accounts	$	$	$	$ 410.00	$	$
37	Notes, portion due next year						
38	Mortgages, due next year						
39	Accrued Interest on non-farm liabilities						
40	TOTAL NON-FARM CURRENT LIABILITIES (add 36-39)				410.00		
41	Notes, portion due after next year						
42							
43	Mortgages, portion due after next year						
44							
45	TOTAL NON-FARM LIABILITIES (add 40 thru 44)				410.00		
46	NON-FARM NET WORTH (line 11 minus line 45)				410.00		
	FARM LIABILITIES						
47	Short Term Farm Notes Payable (form 4.4)	$	$	$	$ 117,825.00	$	$
48							
49							
50	Accounts Payable (form 4.3)				7,000.00		
51							
52							
53	Credit Lines and Short Term Multipayt Notes (form 4.5)						
54	Intermed. & ~~Long Term~~ Notes Due Next Year (form 4.6)				49,350.00		
55	Long Term Notes Due Next Year				26,660.00		
56	Accrued Liabilities (taxes, rent, etc.) (form 4.3)				4,159.00		
57	Accrued Interest (form 4.3 thru 4.6)				21,471.00		
58	TOTAL FARM CURRENT LIABILITIES (add 47 thru 57)				226,665.00		
59	Intermed. Term Debt Due After Next Year (form 4.6)				160,940.00		
60							
61							
62	TOTAL FARM INTERMEDIATE LIABILITIES (add 59-61)				160,940.00		
63	Long Term Debt Due After Next Year (form 4.6)				317,620.00		
64							
65							
66	TOTAL FARM LONG TERM LIABILITIES (add 63-65)				317,620.00		
67	TOTAL FARM LIABILITIES (add 58 + 62 + 66)				705,225.00		
68	TOTAL FARM NET WORTH (line 34 minus 67)				633,745.00		
69	TOTAL LIABILITIES (add 45 + 67)				705,635.00		
70	TOTAL NET WORTH (line 35 minus 69)				728,130.00		
	FINANCIAL RATIOS						
D	NET CAPITAL RATIO (FARM & NON-FARM) = Total Assets (form 6.3 line 35) / Total Liabilities (form 6.4 line 69)				2.03:1		
E	DEBT EQUITY RATIO = Total Liabilities (form 6.4 line 69) / Net Worth (form 6.4 line 70)				.97:1		
F	PERCENT EQUITY = Net Worth (form 6.4 line 70) / Total Assets (form 6.3 line 35) X 100	%	%		50.78 %	%	
	COLUMN	7	8	9	10	11	12

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #7

PART II

A. Current Ratio — 1.01 : 1

Comments: Ratio is very marginal. If market prices drop or interest rates increase could have a problem paying current liabilities.

B. Working Asset Ratio — 1.61 : 1

Comments: Ratio indicates $1.61 of current and intermediate assets to pay each $1 of current and intermediate liabilities. Would like to have ratio of 3:1. Intermediate assets are not readily converted to cash.

C. Net Capital Ratio (Farm) — 1.90 : 1

Comments: Farm business is solvent. Farm has $1.90 assets to cover each $1 of liabilities.

D. Debt/Equity Ratio — .97 : 1

Comments: Farm has 97¢ debt for each $1 in owner equity. Most lenders would prefer a smaller ratio if this were an established farmer.

E. Percent Equity — 50.78%

Comments: Farmer owns 50.78% of the business; someone else owns 49.22%. Would prefer a higher equity position.

Assignment Sheet #8 — Evaluated to satisfaction of instructor

INVENTORY AND NET WORTH STATEMENT
UNIT III

TEST

NAME ______________________________ SCORE ______________

1. Match to their correct definitions terms associated with inventory and net worth statements. Write the correct numbers in the blanks.

_____a. Relationship in quantity, amount, or size between two or more things

_____b. Assets used in or claimed by the farm business

_____c. Livestock, land, and other personal property used to secure a loan

_____d. Sheet that shows financial condition at a definite point in time; lists all assets, values of assets, and liabilities of farm

_____e. Items or resources controlled by the farm business

_____f. Financial claims against the farm business

_____g. Farm business's capacity to generate sufficient cash to meet its financial obligations as they fall due

_____h. Farm business's ability to meet long-run claims against the business

_____i. Value of assets not claimed by individuals or firms outside the farm business or the owner's claim on the assets

_____j. Original cost of an asset, plus the value of improvements or alterations, less the cost of depreciation, losses, or depletion

1. Assets
2. Solvency
3. Inventory
4. Net worth statement
5. Liabilities
6. Collateral
7. Adjusted tax basis
8. Liquidity
9. Net worth
10. Ratio

2. State four reasons for keeping inventory records.

a. ____

b. ____

c. ____

d. ____

TEST

3. Select from the following list factors that determine inventory date. Write an "X" in the blank before each correct answer.

_____a. Period in which there is a large quantity of assets

_____b. Significance in farm operation

_____c. Convenience to operator

_____d. Busiest time of year

4. List seven items to be included in an inventory.

a. ____

b. ____

c. ____

d. ____

e. ____

f. ____

g. ____

5. List the parts of an inventory.

a. ____

b. ____

6. Select from the following list guidelines for making a physical count. Write an "X" in the blank before each correct answer.

_____a. Measure quantities of items in commonly used units

_____b. Use current values

_____c. Group like items

_____d. Take inventory on a single day *or* as of a single date

_____e. Value at cost less depreciation

TEST

7. Match to their correct descriptions methods of valuation for farm inventories. Write the correct numbers in the blanks.

______a. Price at which an item was purchased

______b. Value of an item at the marketplace, less transportation and marketing charges

______c. Lower of production costs; original purchase price compared to current market price

______d. Actual amount invested in cost of producing a farm asset

______e. Assets that provide services to the farm business for a period longer than one year and become less valuable in the process

______f. Asset values that change in accordance with amount resource displaced or removed

1. Farm production costs
2. Net market price
3. Cost minus depletion
4. Market cost
5. Cost or market value
6. Cost minus depreciation

8. Distinguish between current value and book value methods of valuation. Write a "C" for current value and a "B" for book value.

______a. Values assets on an adjusted tax basis

______b. Used to obtain or establish credit

______c. Used for tax purposes and for tax and estate planning

______d. Values all assets at a fair net market value

9. Select from the following list guidelines for estimating current inventory values of machinery and equipment. Write an "X" in the blank before each correct answer.

______a. Value at a current price less cost of marketing

______b. Value at cost less depreciation

______c. Value at conservative, current, "as-is" market value

______d. Treat as a current deductible expense

10. State three guidelines for estimating current inventory values of livestock.

a. ______________________________

b. ______________________________

c. ______________________________

TEST

11. Match to their correct descriptions guidelines for estimating current inventory values of real estate and buildings. Write the correct numbers in the blanks.

_____a. Value at cost less depreciation

_____b. Value at insured value plus 20 percent

_____c. Treat as current deductible expenses up to 25 percent of the gross farming in any year

_____d. Treat as current deductible expenses but limited to the lesser of $5,000 or 25 percent of the taxable income derived from farming during the taxable year

_____e. Value at cost less depreciation

_____f. Value at conservative market value for the whole farm, less buildings and improvements

1. Buildings
2. Land improvements
3. Land
4. Equipment and facilities that are an integral part of production
5. Land-clearing expenses
6. Soil and water conservation expenses

12. State two guidelines for estimating current inventory values of feed, crops, and supplies.

a. ____

b. ____

13. State two guidelines for crop inventory under government loan.

a. ____

____

b. ____

____

14. Select from the following list guidelines for determining cash balances. Write an "X" in the blank before each correct answer.

_____a. Use current market price

_____b. Determine amount of cash on hand

_____c. Reconcile checking account bank statement with checkbook

TEST

15. Distinguish between inventory of receivables and inventory of payables. Write an "R" in the blanks before receivables and a "P" before payables.

______a. Money owed to farm business

______b. Savings accounts

______c. Money owed by farm business

______d. Stock in cooperatives

______e. Money borrowed

______f. Accrued interest

______g. Loans to others

16. Select from the following list purposes of a net worth statement. Write an "X" in the blank before each correct answer.

______a. To measure profitability of farm business

______b. To measure financial position at a specific time

______c. To show cash inflows and outflows for the year

______d. To record growth in the farm business through changes in net worth

______e. To provide an indication of the amount of debt supported by various classes of assets

______f. To provide early warning through ratio analysis of problems that may arise in the short run, intermediate run, and long run

______g. To provide information about crop production

______h. To reveal liquidity and solvency

17. Distinguish among types of assets. Write a "C" in the blanks before current assets, an "I" before intermediate assets, and an "L" for long-term assets.

______a. Are cash and other liquid assets that may be quickly converted into cash without any loss in value

______b. Are used in production and are considered permanent

______c. Are not readily converted to cash because they are not normally held for sale

TEST

______d. Are primarily used in the production process

______e. Are used up in more than one production period

______f. Are not legally or directly attached to the land

______g. Have well-established markets

______h. Have markets that are negotiated by individuals

______i. Have prices that may not be widely known

______j. Have prices that are widely known

______k. Have poorly established markets

______l. Are usually not easily converted to cash without some loss in value

18. Define liabilities according to time.

a. Current liabilities — ______________________________

____

b. Intermediate liabilities — ____________________________

____

c. Long-term liabilities — ______________________________

____

19. List two methods of evaluating net worth statements.

a. ____

b. ____

20. Match ratios to determine liquidity to their correct uses. Write the correct numbers in the blanks.

______a. Used to give cooperator an idea of farm's ability to meet short-term payment obligations

______b. Used to determine farm liquidity over an intermediate time span of one to ten years

1. Current ratio

2. Working asset ratio

TEST

21. Match ratios to determine solvency to their correct uses. Write the correct numbers in the blanks.

_____a. Used as an indicator of long-term solvency of farm business

_____b. Used to measure farm's total financial obligations to creditors in relation to capital provided by farmer

_____c. Used to measure the risk-bearing ability of farm business

1. Debt-to-equity ratio
2. Percent equity ratio
3. Net capital ratio

(NOTE: Test questions 22-29 list the assignment sheets. They are an important part of this test. If they have not been completed, check with your instructor.)

22. Complete a beginning inventory of machinery and equipment.

23. Complete a beginning inventory of breeding livestock.

24. Complete a beginning inventory of real estate and buildings.

25. Complete a beginning inventory of livestock.

26. Complete a beginning inventory of feed, stored and growing crops, and supplies.

27. Complete a beginning inventory of receivables and payables.

28. Interpret a completed net worth statement.

29. Use a beginning-of-the-year checklist.

INVENTORY AND NET WORTH STATEMENT
UNIT III

ANSWERS TO TEST

1.

a.	10	f.	5
b.	3	g.	8
c.	6	h.	2
d.	4	i.	9
e.	1	j.	7

2. Answer should include any four of the following
    a. To obtain a true picture of financial situation
    b. To reflect noncash income and expenses
    c. To provide a management tool
    d. To place values on farm assets
    e. To complete estate planning and settlement
    f. To obtain credit

3. b, c

4. Answer should include any seven of the following
    a. All unsold items at end of tax year
    b. All livestock and poultry held primarily for sale
    c. Livestock held for draft, breeding, dairy, or sporting purposes—whether raised or purchased
    d. All harvested and purchased farm products held for sale or for feed or seed
    e. Growing or standing crops
    f. Machinery and equipment
    g. Buildings

ANSWERS TO TEST

h. Land

i. Cash balances

j. Accounts receivable

k. Accounts payable

l. Prepaid expense items

5. a. Physical count

   b. Valuation

6. a, c, d

7. a. 4 d. 1

   b. 2 e. 6

   c. 5 f. 3

8. a. B

   b. C

   c. B

   d. C

9. b, c

10. Answer should include any three of the following

    a. Purchased breeding animals — Value at cost less depreciation

    b. Raised breeding animals — Use a long-term average value

    c. Market animals — Value at current price less cost of marketing

    d. Livestock purchased for resale — Value at purchase cost

ANSWERS TO TEST

11.

a.	4	d.	5
b.	1	e.	2
c.	6	f.	3

12. Answer should include any two of the following

a. Raised crops — Use current market price less cost for marketing

b. Purchased items — Use cost delivered to the farm

c. Growing crops — Use production costs

13. a. Crops produced during the year that have been entered as a receipt should not be inventoried as an asset

b. Crops produced during the year that have not been entered as a receipt should be inventoried at government loan value

14. b, c

15.

a.	R	e.	P
b.	R	f.	P
c.	P	g.	R
d.	R		

16. b, d, e, f, h

17.

a.	C	e.	I	i.	I
b.	L	f.	I	j.	C
c.	L	g.	C	k.	L
d.	I	h.	I	l.	I

ANSWERS TO TEST

18. Definitions should include the following
    a. Current liabilities — Claims falling due within one year
    b. Intermediate liabilities — Claims that are for more than one year but less than ten years
    c. Long-term liabilities — Claims exceeding ten years in maturity

19. Answer should include any two of the following
    a. Comparison with previous years
    b. Comparison with other farms
    c. Calculation of financial ratios

20. a. 1
    b. 2

21. a. 3
    b. 1
    c. 2

22. Evaluated to the satisfaction of the instructor

23. Evaluated to the satisfaction of the instructor

24. Evaluated to the satisfaction of the instructor

25. Evaluated to the satisfaction of the instructor

26. Evaluated to the satisfaction of the instructor

27. Evaluated to the satisfaction of the instructor

28. Evaluated to the satisfaction of the instructor

29. Evaluated to the satisfaction of the instructor

DEPRECIATION
UNIT IV

UNIT OBJECTIVE

After completing this unit, the cooperator should be able to determine depreciation strategies and be able to compute depreciation for income tax and management purposes. The cooperator will show this knowledge by completing assignment sheets and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the cooperator should be able to

1. Match terms associated with depreciation to their correct definitions.
2. State the purposes of depreciating an asset.
3. Select from a list major causes of depreciation.
4. State rules for determining farm property subject to depreciation.
5. Select from a list property that qualifies for depreciation.
6. State information to know before figuring depreciation.
7. Name cost recovery methods allowed under ACRS of 1981.
8. Select from a list facts about ACRS of 1981.
9. Name the classes of recovery property.
10. Distinguish between regular accelerated cost recovery system (ACRS) for personal property and for real property.
11. State the straight-line ACRS optional recovery periods.
12. Distinguish between straight-line ACRS for personal property and for real property.
13. Complete cost recovery guidelines and asset classifications for Economic Recovery Act of 1981.
14. Select from a list characteristics of expense option.
15. Match to their correct descriptions methods of computing depreciation for management purposes.
16. Complete a depreciation schedule for income tax purposes.
17. Complete a depreciation schedule for management purposes.

DEPRECIATION
UNIT IV

SUGGESTED ACTIVITIES

I. Unit contents

  A. Objective sheet

  B. Suggested activities

  C. Supplements

    1. Supplement #1 — ACRS Depreciation Schedule

    2. Supplement #2 — Recapture — Real Property

    3. Supplement #3 — Guidelines for Depreciating Farm Property for Management Purposes

  D. Information Sheet

  E. Transparency masters

    1. TM #1 — ACRS Depreciation Methods

    2. TM #2 — ACRS Depreciation

    3. TM #3 — ACRS Cost Recovery

    4. TM #4 — Comparison of Cost Recovery Methods

    5. TM #5 — Comparison of Depreciation Methods for Management Purposes

  F. Assignment sheets

    1. Assignment Sheet #1 — Complete a Depreciation Schedule for Income Tax Purposes

    2. Assignment Sheet #2 — Complete a Depreciation Schedule for Management Purposes

  G. Answers to assignment sheets

  H. Test

  I. Answers to test

SUGGESTED ACTIVITIES

II. Instructor's guide

A. Order *Farmer's Tax Guide, Publication 225* to supplement unit.

(NOTE: Order the current issue from your state's Department of Treasury, Internal Revenue Service, IRS Forms Distributions Center. In Oklahoma, order from P. O. Box 2924, Austin, Texas 78769.)

B. Make transparencies; make transparencies or copies of supplements as appropriate.

C. Review the current edition of the *Farmer's Tax Guide* to update unit on the current law. It may also be helpful to review *IRS Publication 534 Depreciation* before teaching this unit.

D. Provide cooperators with objective sheet.

E. Discuss unit and specific objectives

1. Point out the importance of using depreciation for income tax purposes to recover the cost of a capital asset.

2. Point out the importance of keeping good records for property that is depreciated. Records of depreciable property and of depreciation allowed are important to verify the accuracy of information filed on income tax forms.

3. Emphasize the use of depreciation for management purposes to spread capital asset costs over the useful life of the asset and to control distortion of expense figures.

F. Provide cooperators with information and assignment sheets.

G. Discuss information and assignment sheets.

1. Discuss Objective 1. Point out the importance of using the proper terminology for a better understanding of depreciation and of the Accelerated Cost Recovery System (ACRS).

2. Discuss Objective 2. Point out that depreciating an asset estimates annual noncash expense by prorating cost basis over useful life; adjusts taxable income by decreasing taxable income; and estimates current value. Explain that if depreciation is overstated, the overstatement implies less capital invested in assets than could be realized if the assets were sold, thus creating a deflated net worth. Explain that showing assets at greater market value overstates net worth.

SUGGESTED ACTIVITIES

3. Discuss Objective 3. Explain that useful life is inversely related to use, and that the greater the useful life, the lower the value. Also point out that obsolescence and deterioration will occur even if the asset is not used.

4. Discuss Objectives 4 and 5. Emphasize that property with a useful life of more than one year should be depreciated to recover the asset's cost.

5. Discuss Objective 6. Illustrate how to determine the adjusted tax basis and depreciable balance of an asset.

6. Discuss Objective 7. Use Transparency #1 to emphasize that massive changes from the old depreciation rules were made by the Economic Recovery Tax Act of 1981. These rules apply to acquisitions made in 1981 or later. Also point out that in the new law, the tax jargon has changed from *depreciation* to *cost recovery* if recovery property is involved. If recovery property is not involved, the old rules for depreciation remain applicable. Emphasize that the straight-line ACRS method is an optional method. Point out that property acquired in certain transactions from persons who used it in 1980 is not recovery property and must be depreciated under the old rules.

EXAMPLE: Conditions under which old rules must be used:

- Cooperator or a party related to cooperator owned or used the property in 1980;
- Cooperator leased the property to anyone who owned or used the property in 1980;
- Cooperator acquired the property from its 1980 owner, but the person actually using the property does not change; and
- Property acquired in a tax-free exchange does not qualify as recovery property to the extent that the property's basis is carried over from property owned before 1981.

7. Discuss Objective 8. Use Transparency #2 to illustrate the differences between rules used prior to 1981 and ACRS rules. Emphasize that the same recovery period must be used for all property of a class from which such election is made.

SUGGESTED ACTIVITIES

8. Discuss Objective 9. Point out that classification of property depends on the class life of the property under the old Asset Depreciation Range (ADR) depreciation rules, and on whether it is Section 1245, tangible personal property, or Section 1250, real estate property.

9. Discuss Objectives 10 through 12. Work examples on the chalkboard so that class members can see the calculation process. Use transparency #3 to illustrate the regular ACRS and the optional straight-line ACRS to compare methods of depreciation using the new rules. Point out that the depreciable balance is taken to zero. Have cooperators complete Assignment Sheet #1. Use Supplement #1 to illustrate another type of form used. Discuss basis adjustment for investment tax credit. Use Supplement #2 to illustrate that when an asset is sold, depreciation will have to be recovered as ordinary income.

10. Discuss Objective 13. Emphasize to cooperators that they must follow the new rules on property purchased since January 1, 1981.

11. Discuss Objective 14. Emphasize that the expense option limit is changing, and that no investment credit is allowed on the amount expensed.

12. Discuss Objective 15. Emphasize differences between depreciation for income tax and management purposes. Point out that the double-declining balance method is the fastest write-off. Work examples on the chalkboard so that class members can see the calculation process. Have cooperators complete Assignment Sheet #2. After cooperators have completed Assignment Sheet #2, show Transparency #5, comparing the different depreciation methods. You may wish to use Supplement #3 as a set of guidelines for depreciating farm property for management purposes.

13. In concluding remarks, summarize that the new rules apply to recovery property acquired in 1981 or after. Stress that the old rules apply to farm properties acquired before 1981 and to farm assets that do not qualify as recovery property: primarily assets purchased from related parties. Thus, for the foreseeable future, a farmer will have to be alert to the two sets of depreciation rules.

14. Have cooperators obtain current depreciation schedules for individual on-farm instruction. Encourage cooperators to enter the depreciation schedule into their record system. Check depreciation schedules for possible discrepancies. Compare depreciation schedule with beginning inventory to make sure that nothing has been left off the depreciation schedule or that an asset which has been discarded has been taken off the depreciation schedule. Discuss with cooperator anticipated capital asset purchases or trades and strategies for depreciation.

SUGGESTED ACTIVITIES

15. Have a competent income tax accountant speak to class on depreciation strategies.

H. Give test.

I. Critique test.

J. Reteach if necessary.

III. Unit references

A. *Cost Recovery-The New Depreciation.* St. Louis, Missouri: Doane's Reference Volume No. 481, Doane's Agricultural Report, 1982.

B. *Farmer's Tax Guide.* Publication 225, rev. Washington, D.C.: Department of the Treasury, Internal Revenue Service, 1982.

C. Hardin, Mike L., and Joseph E. Williams. *Oklahoma Young Farmer Record Book.* Stillwater, Oklahoma: Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1981.

D. Hodgens, Jim, and Leland Myers. *Farm Business Management Year 1.* Stillwater, Oklahoma: Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1979.

E. Maynard, Cecil D., and Mike L. Hardin. *Depreciation and Investment Credit.* Stillwater, Oklahoma: Oklahoma State University, OSU Extension Facts No. 748, 1982.

F. *National FFA Contest Bulletin No. 4 1982/1983/1984.* Alexandria, Virginia: National Future Farmers of America Center, 1982.

SUGGESTED ACTIVITIES

SUPPLEMENT #1

Oklahoma State University
Agricultural Economics

ACRS DEPRECIATION SCH

Description	Date of Purchase	Cost			ACRS		Expensed Deduction	Unrecovered Cost Col. 5-8	Investment Credit			
		Unrecovered Cost of Trade in	Boot Paid	Total Cost	Class[1]	Method[2]			New or Used	Amount	Yr Claimed	Yr Used
1	2	3	4	5	6	7	8	9	10	11	12	13

[1] Enter 3, 5, 10, or 15

[2] For 3 yr. Class Property enter A (for accelerated) or 3, 5, or 12 for straight line method.
For 5 yr. Class Property enter A (for accelerated) or 5, 12, or 25 for straight line method.

For 10 yr. Clas
15 yr. Class Pr

SIX YEAR
EDULE 3, 5, 10 OR 15 YEAR PROPERTY

Cooperative Extension
Farm Management

Cost Recovered 19___			Cost Recovered 19___			Cost Recovered 19___			Cost Recovered 19___			Cost Recovered 19___			Cost Recovered 19___		
% Rate 14	Cost Recovered This Year 15	Bal. Deprec. 16	% Rate 17	Cost Re-Covered This Year 18	Bal. Deprec. 19	% Rate 20	Cost Recovered This Year 21	Bal. Deprec. 22	% Rate 23	Cost Recovered This Year 24	Bal. Deprec. 25	% Rate 26	Cost Recovered This Year 27	Bal. Deprec. 28	% Rate 29	Cost Recovered This Year 30	Bal. Deprec. 31

Property enter A (for accelerated) or 10, 25, or 35 for straight line method. For
operty enter A (for accelerated) or 15, 35, or 45 for straight line method.

SUGGESTED ACTIVITIES

SUPPLEMENT #2

Recapture — Real Property

1. Gain as result of regular ACRS recaptured as ordinary income for nonresidential property
2. For residential, ordinary income, to extent accelerated exceeded straight line
3. Capital gain if straight line is used

SUGGESTED ACTIVITIES

SUPPLEMENT #3

Guidelines for Depreciating Farm Property for Management Purposes

Kind of property	Eligible additional 20% first year depreciation?[1]	Depreciation methods Straight-line = SL Declining balance = DB[2]	Suggested life	Basis for computing depreciation on property acquired in a trade		
				by straight-line (SL) method	by declining balance (DB) method	Add'l 1st yr. depreciation
New machinery	Yes, if estimated life is 6 yrs. or more.	SL—yes; DB—yes if estimated life is 3 yrs. or more. (claim up to 2 × SL rate)	Your experience	"Cash difference" paid plus "unrecovered cost" of trade-in (less add'l 1st year depr. if claimed) (less salvage value if required)	"Cash difference" plus "unrecovered cost" of trade-in (less additional first year depreciation if claimed).	"Cash difference" only
Used machinery	Same as above	SL—yes; DB—yes if estimated life is [illegible] yrs. or more (claim up to 1½ × SL rate)	Same as above	Same as above	Same as above	"Cash difference" only
New buildings	Not eligible	Same as used machinery	25 years	Cost (less salvage value if required)	Cost	Not eligible
Used buildings	Not eligible	Straight-line only	Your experience	Same as new building	Cost	Not eligible
Fence, silos, grain storage, drain tiles	Not eligible	Straight-line—yes Declining balance—yes	25 years fence 10 years	Same as new buildings	Cost	Not eligible
Breeding and dairy animals purchased	Yes, if estimated life is 6 yrs. or more	Same as new or used machinery	3-7 years	Same as new machinery	Same as new machinery	"Cash difference" only
Fruit trees and vines	Not eligible	Same as new or used machinery	Your experience	Cost	Cost	Not eligible

[1] The cost of property is limited to $10,000—single return, $20,000—joint return, $10,000—corporations, $10,000—partnerships in 1976 tax law.

[2] May change from declining balance to straight-line.

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DEPRECIATION
UNIT IV

INFORMATION SHEET

I. Terms and definitions

A. Depreciation — Method of prorating the cost of a working asset over its useful life

(NOTE: Depreciation may also be defined as that decrease in value that occurs regardless of repair and maintenance.)

B. Working asset — Asset that gives productive service to the farm business over a period longer than one year

(NOTE: Internal Revenue Service *Farmer's Tax Guide* specifies that the cost of machinery, equipment, farm buildings, and other property with a useful life of one year or more may not be deducted as an expense in the year of purchase.)

C. Tangible property — Material property that can be felt or touched

D. Intangible property — Property that has no material characteristics but is merely the evidence of value

EXAMPLES: Certificates of stock, bonds, promissory notes, franchises

E. Investment tax credit — Credit against or reduction in federal income tax

F. Useful life — Period over which the asset is expected to be useful in the farm business or in the production of income

(NOTE: Do not confuse useful life with the physical life of an asset.)

G. Salvage value — Estimated value of an asset when it is no longer useful in the farm business or in the production of income

H. Basis — Measure of owner's investment in owned property

EXAMPLES: Purchase price of asset purchased new; cash difference paid, plus the undepreciated value of asset traded in

I. Cash difference — Cash paid in addition to trade-in

(NOTE: Cash difference is sometimes called *boot*.)

J. Accelerated Cost Recovery System (ACRS) — Depreciation methods that apply to farm properties acquired during or after 1981

INFORMATION SHEET

K. Depreciation schedule — Form summarizing original cost, prior depreciation allowances taken, adjustments to basis, current depreciation, remaining value for each asset, and method of prorating cost of capital assets over their useful life

L. Adjusted tax basis — Original cost of an asset plus the value of improvements or alterations less the cost of depreciation, losses, or depletion

M. Depreciable balance — Value of an asset to be depreciated

(NOTE: When property is depreciated, a certain percentage of the owner's basis in the property is deducted each year, giving a new depreciable balance. Depreciable balance is sometimes referred to as *book value*.)

N. Recovery property — Most tangible, depreciable property acquired after 1980

(NOTE: There are some exceptions if property was used prior to 1981.)

O. Annual recovery — Percentage of an asset's cost to be recovered each year

P. Half-year convention — Treatment of each property as placed in service on the first day of the last half of the first year of use, regardless of the month of acquisition

(NOTE: Half-year convention is used under the cost recovery statutes of the Economic Recovery Tax Act of 1981.)

II. Purposes of depreciating an asset

A. Estimating annual noncash expense

B. Adjusting taxable income

C. Determining book value

III. Major causes of depreciation

A. Wear and tear due to use

B. Obsolescence due to new technology

C. Deterioration due to elements of nature

INFORMATION SHEET

IV. Rules for determining farm property subject to depreciation

A. Allow reasonable deductions for the exhaustion, wear, and tear of property used in a trade or business, or of property held for the production of income

(NOTE: Property used for personal use, such as a personal automobile, is not deductible as a business expense.)

B. Include all assets that are used in the business of farming and that have a determined useful life of more than one year

(NOTE: Do not depreciate buildings on a farm or ranch if they are not used in the farming business, or if they were not purchased with the intention of using them in the farming business.)

V. Property that qualifies for depreciation

A. Farm buildings

EXAMPLES: Barns, grainaries, sheds

(NOTE: The personal dwelling cannot be depreciated.)

B. Farm machinery and equipment

EXAMPLES: Tractors, trucks, trailers, drills

(NOTE: Only the farm share of the family automobile may be depreciated.)

C. Livestock acquired for work, breeding, or dairy purposes

EXAMPLES: Purchased breeding livestock, draft horses

(NOTE: Livestock purchased for resale, and raised livestock cannot be depreciated.)

D. Other physical farm property

EXAMPLES: Fences, water systems

(NOTE: Land cannot be depreciated.)

VI. Information to know before figuring depreciation

A. Your basis in the property

EXAMPLES: Cash paid, cash difference plus depreciable balance of trade-in

INFORMATION SHEET

B. When the property was placed in service

C. Which method of depreciation you elect to use

VII. Cost Recovery methods allowed under ACRS of 1981

A. Regular Accelerated Cost Recovery System

B. Straight-Line Accelerated Cost Recovery System

(NOTE: The straight-line Accelerated Cost Recovery System is sometimes referred to as the *optional* or *alternate method*.)

VIII. Facts about ACRS of 1981

A. Salvage value is disregarded

B. Methods and periods are the same for both new and used property

C. No depreciation is allowed in the year personal property is disposed of

D. Cost is recovered over a three-year, five-year, ten-year, or fifteen-year period

E. Part-year depreciation for real property is determined by the number of months item was owned

F. In a given year, the same recovery period must be used for all personal property of a class for which such election is made

EXAMPLE: All five-year property would have to be treated the same in a given year.

IX. Classes of recovery property

A. Three-year property

EXAMPLES: Autos, light trucks (under 13,000 GVW), tools, breeding swine, some race horses

B. Five-year property

EXAMPLES: Most machinery and equipment, breeding livestock, single-purpose agricultural structures, fences, heavy trucks

C. Ten-year property

EXAMPLES: Utility property, mobile homes

D. Fifteen-year property

EXAMPLE: Buildings

INFORMATION SHEET

X. Regular accelerated cost recovery system (ACRS) for personal property and real property (Assignment Sheet #1)

A. Personal property — Cost recovery is determined by multiplying the statutory percentage for the respective class of property by the item's cost basis (Table 1)

EXAMPLE:

TABLE 1

Regular ACRS Statutory Percentage for Personal Property

Recovery Life	Depreciation per Year for 1981 - 1984*						
	1st	2nd	3rd	4th	5th	6th	7th
3	25%	38%	37%	—	—	—	
5	15%	22%	21%	21%	21%	—	
10	8%	14%	12%	10%	10%	10%	9% (through tenth year)
15	5%	10%	9%	8%	7%	7%	6% (through fifteenth year)

*Consult current tax law for changes.

(NOTE: The half-year convention is built into the statutory percentage for easy calculation. No cost recovery is allowed in the year of disposition.)

EXAMPLE: A new tractor is purchased on November 1, 1982, for $35,000. Tractors are classified as five-year recovery property.

0.15 × $35,000 =	$5,250	First year cost recovery
0.22 × $35,000 =	$7,700	Second year cost recovery
0.21 × $35,000 =	$7,350	Third year cost recovery
0.21 × $35,000 =	$7,350	Fourth year cost recovery
0.21 × $35,000 =	$7,350	Fifth year cost recovery
	$35,000	Total cost recovery taken

INFORMATION SHEET

B. Real property — Annual cost recovery is determined by multiplying the statutory percentage for the month purchased by the property's cost basis (Table 2)

EXAMPLE:

TABLE 2

Regular ACRS Statutory Percentage for Real Property

If the recovery year is —	The applicable percentage is — (Use the column for the month in the first year the property is placed in service.)											
	1	2	3	4	5	6	7	8	9	10	11	12
1	12	11	10	9	8	7	6	5	4	3	2	1
2	10	10	11	11	11	11	11	11	11	11	11	12
3	9	9	9	9	10	10	10	10	10	10	10	10
4	8	8	8	8	8	8	9	9	9	9	9	9
5	7	7	7	7	7	7	8	8	8	8	8	8
6	6	6	6	6	7	7	7	7	7	7	7	7
7	6	6	6	6	6	6	6	6	6	6	6	6
8	6	6	6	6	6	6	5	6	6	6	6	6
9	6	6	6	6	5	6	5	5	5	6	6	6
10	5	6	5	6	5	5	5	5	5	5	6	5
11	5	5	5	5	5	5	5	5	5	5	5	5
12	5	5	5	5	5	5	5	5	5	5	5	5
13	5	5	5	5	5	5	5	5	5	5	5	5
14	5	5	5	5	5	5	5	5	5	5	5	5
15	5	5	5	5	5	5	5	5	5	5	5	5
16	—	—	1	1	2	2	3	3	4	4	4	5

(NOTE: The proportional first-year convention is built into the statutory percentage for easy calculation. Cost recovery in the year of disposition will be equal to months owned in year of sale, divided by 12, times the annual cost recovery.)

EXAMPLE: A new multipurpose farm building was placed in service on March 1, 1982. It is classified as fifteen-year real property, and its cost is $22,000.

0.10 × $22,000 = $2,200 First year cost recovery

0.11 × $22,000 = $2,420 Second year cost recovery

0.09 × $22,000 = $1,980 Third year cost recovery

INFORMATION SHEET

XI. Straight-line ACRS optional recovery periods (Table 3)

TABLE 3

In case of —	You may elect a recovery period of —
Three-year property	3, 5, or 12 years
Five-year property	5, 12, or 25 years
Ten-year property	10, 25, or 35 years
Fifteen-year property	15, 35, or 45 years

(NOTE: The half-year convention must be used in the year purchased, and the last half year must be claimed following the end of the recovery period.)

XII. Straight-line ACRS for personal property and real property

A. Personal property — Annual cost recovery is determined by dividing the original cost basis by the regular or optional longer recovery period; first year's cost recovery is independent of date purchased

(NOTE: Personal property may be three-year or five-year recovery property. First-year depreciation is one-half annual cost recovery. The last half year is claimed in the year following the end of the recovery period. No cost recovery is allowed in the year of disposition.)

EXAMPLE: A new tractor is purchased on November 1, 1982, for $35,000. Tractors are classified as five-year recovery property. Assume the optional straight-line recovery period of five years.

$\frac{\$35{,}000}{5 \text{ years}} =$	$7,000	Annual cost recovery
$\frac{\$7{,}000}{2} =$	$3,500	First year cost recovery
	$7,000	Second year cost recovery
	$7,000	Third year cost recovery
	$7,000	Fourth year cost recovery
	$7,000	Fifth year cost recovery
	$3,500	Year following end of recovery period
	$35,000	Total cost recovery taken

INFORMATION SHEET

B. Real property — Annual cost recovery is determined by dividing the original cost basis by the regular or optional longer recovery period; first year's cost recovery is dependent upon month purchased

(NOTE: First-year cost recovery is equal to annual cost recovery multiplied by months owned divided by 12. Cost recovery in the year of disposition is also annual cost recovery multiplied by months owned divided by 12. The months not claimed in the first year are claimed in the year following the end of the recovery period.)

EXAMPLE: A new multipurpose farm building was placed in service on March 1, 1982. It is classified as fifteen-year real property, and its cost is $22,000. Assume the optional straight-line recovery period of fifteen years.

$$\frac{\$22{,}000}{15\ \text{years}} = \$1466.66 \quad \text{Annual cost recovery}$$

$$\frac{\$1466.66 \times 10\ \text{months}}{12} = \$1{,}222.22 \quad \text{First year cost recovery}$$

$1,466.66	Second through fifteenth year cost recovery ($20,533.24 total)
$ 244.54	Year following end of recovery period
$22,000.00	Total cost recovery taken

INFORMATION SHEET

XIII. Cost recovery guidelines and asset classifications for Economic Recovery Act of 1981 (Table 4; Assignment Sheet #1)

TABLE 4

General Information						**Regular (ACRS)**		**Straight-Line (ACRS)**	
Property Description	*Code Section*	*ADR*	*Investment Credit Percent*	*First Year Recovery**	*Recovery in Year of Disposal*	*Recovery Period or Estimated Life*	*Depreciation Recapture Ordinary Income*	*Recovery Period or Estimated Life*	*Depreciation Recapture Ordinary Income*
Automobiles	1245	3	6	½ year	None	3	Yes	3, 5, 12	Yes
Pickup & light trucks less than 13,000 #GVW	1245	3	6	½ year	None	3	Yes	3, 5, 12	Yes
Trucks greater than 13,000 #GVW	1245	6	10	½ year	None	5	Yes	5, 12, 15	Yes
Breeding Swine	1245	3	6	½ year	None	3	Yes	3, 5, 12	Yes
Breeding cattle (dairy & beef)	1245	7	10	½ year	None	5	Yes	5, 12, 25	Yes
Breeding sheep	1245	5	10	½ year	None	5	Yes	5, 12, 25	Yes
Breeding horses		10	0	½ year	None	5	Yes	5, 12, 25	Yes
Single purpose ag structures (grain bins, hay storage, silage storage)	1245	10	10	½ year	None	5	Yes	5, 12, 25	Yes
Orchard	1245	20	10	½ year	None	5	Yes	5, 12, 25	Yes
Ag machinery and equipment	1245	10	10	½ year	None	5	Yes	5, 12, 25	Yes
Fences	1245	10	10	½ year	None	5	Yes	5, 12, 25	Yes
Water systems	1245		10	½ year	None	5	Yes	5, 12, 25	Yes
Mobile homes			0	½ year	None	10	Yes	10, 25, 35	No
Nonresidential farm buildings	1250	25	0	Prop(B)	Prop(B)	15	Yes	15, 35, 45	No
Residential farm buildings	1250	25	0	Prop(B)	Prop(B)	15	(A)	15, 35, 45	No

*Half year convention built into tables for regular ACRS

(A) = Amount in excess of straight-line fifteen year is recaptured as ordinary income. (B) = Recovery is equa [illegible] he portion of the year (in months) asset is in service.

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INFORMATION SHEET

XIV. Characteristics of expense option

(NOTE: A provision allowing the immediate deduction of the cost of some assets became available in 1982.)

(CAUTION: Internal Revenue Service regulations and publications change frequently. Always use the most current information available.)

A. Is limited in amount

B. Applies to purchases of tangible personal property that qualifies for investment credit

C. Does not allow investment credit on the cost of property expensed under this election

D. Requires recapture of full expensed amount in the year of sale of disposed property

(NOTE: Full amount is recaptured even on an installment sale.)

E. Stipulates that property must be purchased for use in trade or business

(NOTE: The option does not apply to inherited property or property that has a basis determined by reference to the basis of other property, such as a tax-free exchange. Also, property acquired from related parties does not qualify.)

INFORMATION SHEET

XV. Descriptions of methods of computing depreciation for management purposes (Assignment Sheet #2)

A. Straight-line — Method of calculating depreciation in which total depreciation is spread evenly over life of asset

(NOTE: The salvage value is subtracted from the cost or basis, and the difference is divided by the useful life of the asset. The result is annual depreciation for the life of the asset.)

EXAMPLE: A tractor purchased on January 1, 1979, for \$35,000 has an estimated useful life of seven years and a salvage value of \$7,000.

$$\text{Annual Depreciation} = \frac{\text{Basis} - \text{Salvage Value}}{\text{Useful Life of Asset}} = \frac{\$35{,}000 - \$7{,}000}{7 \text{ years}} = \$4{,}000$$

Year	Annual Depreciation	Accumulated Depreciation	Depreciable Balance
1	\$4,000	\$ 4,000	\$31,000
2	4,000	8,000	27,000
3	4,000	12,000	23,000
4	4,000	16,000	19,000
5	4,000	20,000	15,000
6	4,000	24,000	11,000
7	4,000	28,000	7,000

This procedure is used for the seven years, with the depreciable balance at the end equal to the salvage value. If the tractor had been purchased at midyear, the first year's depreciation would be $^{6}/_{12}$ × \$4,000, or \$2,000. Each year thereafter the depreciation would be \$4,000, until the last year when it would be \$2,000.

INFORMATION SHEET

B. **Declining balance** — Method of calculating depreciation in which annual depreciation is taken to be a constant proportion of each year's adjusted basis

(NOTE: Annual depreciation is equal to a constant percentage multiplied by the depreciable balance. The constant percentage is determined by dividing the useful life into 100 percent to arrive at a constant percent per year. Double the straight-line rate is called *double declining balance*. Salvage value is not used in the computation of depreciation; however, the asset cannot be depreciated below a reasonable salvage value.)

EXAMPLE: A tractor was purchased on January 1, 1979, for $35,000; it has an estimated useful life of seven years; and salvage value is $7,000. Double declining balance method is used.

$$\text{Straight-Line Rate} = \frac{100\%}{\text{Useful Life of Asset}}$$

$$= \frac{100\%}{7\text{ years}}$$

$$= 14.29\%$$

$$\text{Double Declining Balance Rate} = 14.29\% \times 2$$

$$= 28.58\%$$

$$\text{First Year Depreciation} = 28.58\% \times \$35{,}000$$

$$= \$10{,}003$$

Year	Yearly Depreciation	Accumulated Depreciation	Depreciable Balance
1	$10,003	$10,003	$24,997
2	7,144	17,147	17,853
3	5,102	22,249	12,751
4	3,644	25,893	9,107
5	2,107	28,000	7,000
6	—	28,000	7,000
7	—	28,000	7,000

INFORMATION SHEET

Salvage value was reached in the fifth year. If the tractor were purchased at midyear instead of the beginning of the year, the computations would be as follows:

28.58% × \$35,000 × 6/12 = \$5,001.50 First year depreciation

\$35,000 − \$5,001.50 = \$29,998.50 Depreciable balance

28.58% × \$29,998.50 = \$8,573.57 Second year depreciation

\$29,998.50 − \$8,573.57 = \$21,424.93 Depreciable balance

C. Sum-of-the-years digits — Method of calculating depreciation in which the rate of annual depreciation declines as asset becomes older

(NOTE: This method allows greater depreciation charges in earlier years than does the straight-line method, but does not allow as great a depreciation as does the declining balance method.)

ACRS Depreciation

Methods

1. Regular ACRS
2. Straight-line ACRS

Different Rules

1. Personal property
2. Real property

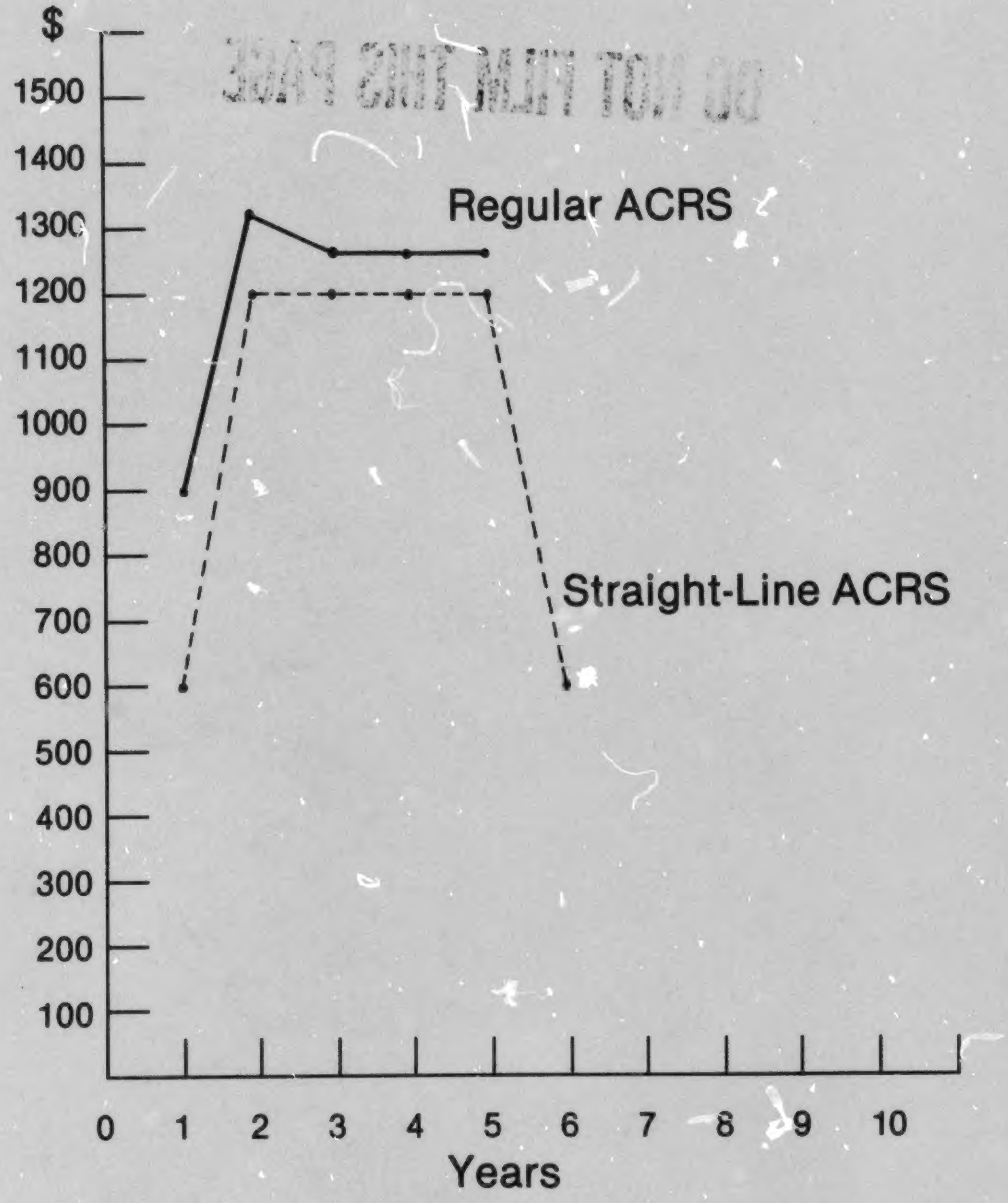
ACRS Depreciation

1. No longer use salvage value
2. Do not take depreciation in year of disposition
3. Must use given depreciation for regular ACRS
4. A. Must use half-year convention for straight line
    B. Take half depreciation during year purchased; take half depreciation during year following recovery period
5. Use same method for used and new

ACRS Cost Recovery

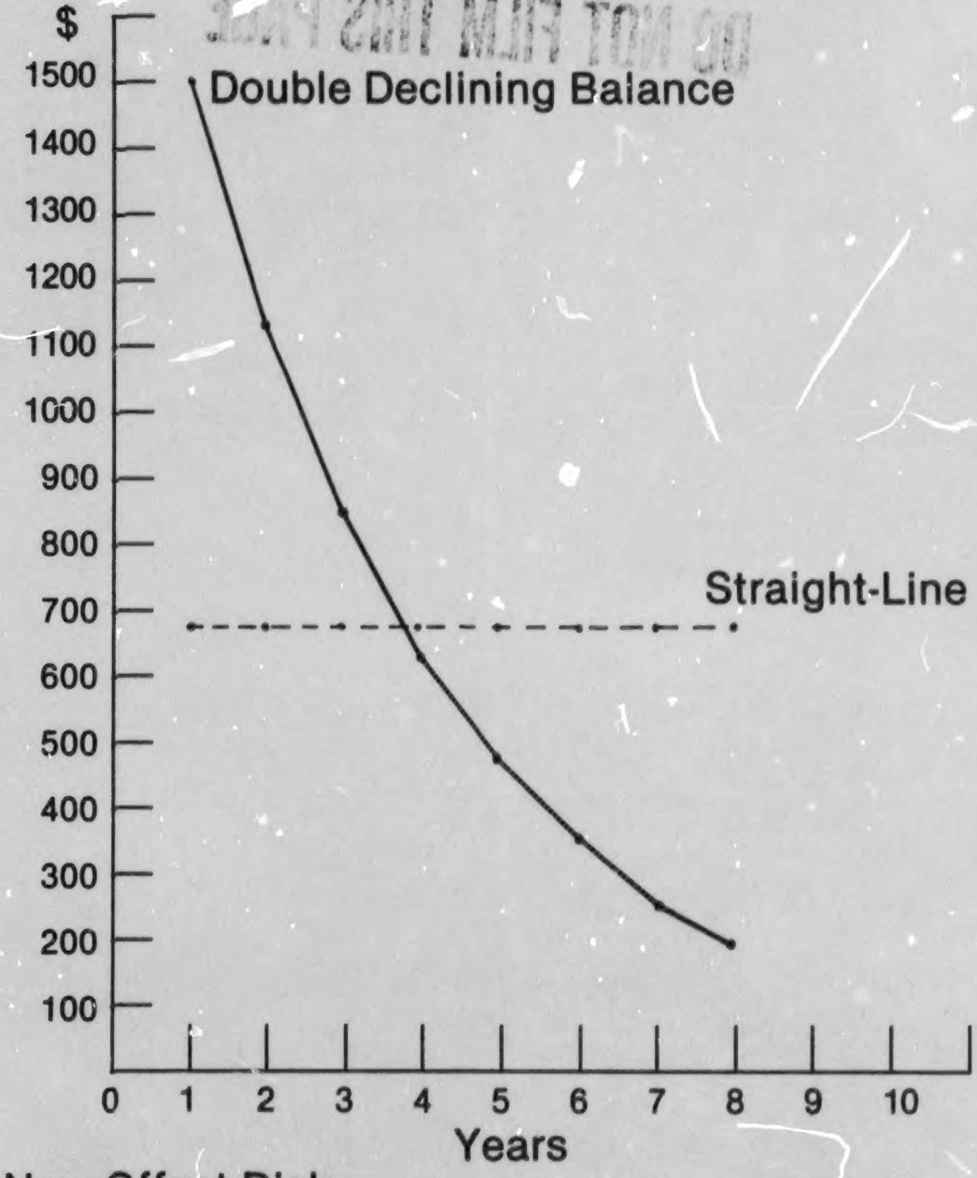
Recovery Year	Regular ACRS (Option One)			Mandatory Recovery Periods (Years)	Straight-Line ACRS (Option Two)		
	Three-Year	Five-Year	Fifteen-Year		Three-Year	Five-Year	Fifteen-Year
1	25%	15%	Table		3	5	15
2	38%	22%	Table		5	12	35
3	37%	21%	Table		12	25	45
4	—	21%	Table				
5	—	21%	Table				

Comparison of Cost Recovery Methods



New Offset Disk
Basis—$6,000
Five-Year Recovery Property

Comparison of Depreciation Methods for Management Purposes



New Offset Disk
Basis—$6,000
Salvage Value—$600
Useful Life—Eight Years

DEPRECIATION
UNIT IV

ASSIGNMENT SHEET #1 — COMPLETE A DEPRECIATION SCHEDULE FOR INCOME TAX PURPOSES

NAME ______________________________ SCORE ______________

The purpose of this assignment sheet is to familiarize the cooperator with cost recovery using the ACRS rules. The rules apply to farm properties acquired in 1981 or after. Internal Revenue Service regulations change frequently. The cooperator should always use the most current information available.

Use Tables 5 through 7 and the information in Parts I through III to complete a depreciation schedule for income tax purposes. Assume that the starting year is 1984.

(NOTE: The balance for depreciation should include adjustments for cost election or investment tax credit basis adjustment, if taken. Investment tax credit was reduced for 1983 and 1984 purchases. No basis adjustments were made.)

TABLE 5

Regular ACRS Statutory Percentage for Personal Property

Recovery Life	Depreciation per Year for 1981 - 1984							
	1st	2nd	3rd	4th	5th	6th	7th	
3	25%	38%	37%	—	—	—		
5	15%	22%	21%	21%	21%	—		
10	8%	14%	12%	10%	10%	10%	9%	(through tenth year)
15	5%	10%	9%	8%	7%	7%	6%	(through fifteenth year)

ASSIGNMENT SHEET #1

TABLE 6

Regular ACRS Statutory Percentage for Real Property

If the recovery year is —	The applicable percentage is — (Use the column for the month in the first year the property is placed in service.)											
	1	2	3	4	5	6	7	8	9	10	11	12
1	12	11	10	9	8	7	6	5	4	3	2	1
2	10	10	11	11	11	11	11	11	11	11	11	12
3	9	9	9	9	10	10	10	10	10	10	10	10
4	8	8	8	8	8	8	9	9	9	9	9	9
5	7	7	7	7	7	7	8	8	8	8	8	8
6	6	6	6	6	7	7	7	7	7	7	7	7
7	6	6	6	6	6	6	6	6	6	6	6	6
8	6	6	6	6	6	6	5	6	6	6	6	6
9	6	6	6	6	5	6	5	5	5	6	6	6
10	5	6	5	6	5	5	5	5	5	5	6	5
11	5	5	5	5	5	5	5	5	5	5	5	5
12	5	5	5	5	5	5	5	5	5	5	5	5
13	5	5	5	5	5	5	5	5	5	5	5	5
14	5	5	5	5	5	5	5	5	5	5	5	5
15	5	5	5	5	5	5	5	5	5	5	5	5
16	—	—	1	1	2	2	3	3	4	4	4	5

TABLE 7

Straight-Line ACRS Optional Recovery Periods

In case of —	You may elect a recovery period of —
Three-year property	3, 5, or 12 years
Five-year property	5, 12, or 25 years
Ten-year property	10, 25, or 35 years
Fifteen-year property	15, 35, or 45 years

ASSIGNMENT SHEET #1

PART I — MACHINERY AND EQUIPMENT

(NOTE: Round dollar figures to nearest two decimals.)

A. Purchased new ½-ton pickup (GVW less than 13,000 pounds) on September 15, 1982, for $9,200 cash difference plus trade-in of old pickup with depreciable balance of $1,500. Used regular ACRS method; depreciation taken in prior years totaled $6,741.

B. Purchased new automobile on October 2, 1982. The farm share of the cash paid was $5,100. Used regular ACRS method; depreciation taken in prior years totaled $3,213.

C. Purchased new tractor on March 31, 1983, for $33,000 cash difference plus trade-in of old tractor with depreciable balance of $12,000. Took $5,000 expense election and used straight-line ACRS with five-year recovery period. Depreciation taken in prior years totaled $4,000.

D. Purchased new plow on March 31, 1983, for $5,000 cash difference plus trade-in of old plow with depreciable balance of $500. Used straight-line ACRS with five-year recovery period; depreciation taken in prior years totaled $550.

E. Purchased used cotton modular builder on December 27, 1983, for $21,000 cash paid. Used straight-line ACRS with five-year recovery period; depreciation taken in prior years totaled $2,100.

F. Purchased new plow on September 3, 1984, for $1,500 cash difference plus trade-in of plow purchased on March 31, 1983; used regular ACRS method.

G. Purchased used chisel on October 15, 1984, for $5,250 cash paid; took expense election of $5,000, and used regular ACRS method.

ASSIGNMENT SHEET #1

FORM 3.1 **PAGE** **DEPRECIATION SCHEDULE:** ____________________ **MACHINERY AND EQUIPMENT**

						COST INFORMATION					DEPRECIATION INFORMATION					
LINE	DATE ACQUIRED	ITEM DESCRIPTION KIND OF MACHINE, MAKE, MODEL, SIZE	ID. NO.	NEW OR USED	INVEST. CREDIT	REM'NG BOOK VALUE OF TRADE-IN	CASH DIFF. PAID	TOTAL COST BASIS	EXPENSE ELECTION	BASIS ADJUST.	BALANCE FOR REGULAR DEPREC.	LIFE	METHOD	ANNUAL DEPREC % or $	DEPREC. TAKEN IN PRIOR YEARS	LINE
1																1
2																2
3																3
4																4
5																5
6																6
7																7
8																8
9																9
10																10
11																11

FORM 3.2 **PAGE** **DEPRECIATION SCHEDULE:** ______________ **MACHINERY AND EQUIPMENT (CONT'D)**

	START 19__	END 19__		END 19__		END 19__		ESTIMATED CURRENT CASH VALUE			
LINE	REMAINING BK. VAL. AT START OF YEAR	DEPREC THIS YEAR	REMAINING BOOK VALUE	DEPREC. THIS YEAR	REMAINING BOOK VALUE	DEPREC. THIS YEAR	REMAINING BOOK VALUE	START 19__	END 19__	END 19__	END 19__
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											

ASSIGNMENT SHEET #1

PART II — LIVESTOCK FOR BREEDING

(NOTE: Only purchased breeding livestock should be entered. Round dollar figures to two decimal places. Complete per head calculations for each period. Complete per lot calculations for start of 1984 and end of 1984 only.)

A. Purchased ten beef cows on January 31, 1982, for $400 each for a total cost of $4,000; used straight-line ACRS with five-year recovery period. Depreciation taken in prior years totaled $120 per head. Ten head were on hand at end of 1984.

B. Purchased two yearling bulls on March 23, 1983, for $750 each for a total cost of $1,500; used straight-line ACRS with five-year recovery period. Depreciation taken in prior years totaled $75 per head. Two bulls were on hand at the end of 1984.

C. Purchased ten bred gilts on September 28, 1983, for $500 each for total of $5,000; used regular ACRS. Depreciation taken in prior years totaled $125 per head. Four of the gilts were sold during 1984.

D. Purchased a registered boar (first time in service) on October 15, 1983, for $1,000; used regular ACRS. Depreciation taken in prior years was $250. Boar was on hand at end of 1984.

E. Purchased four bred gilts on April 15, 1984, for $500 each for a total of $2,000; used straight-line ACRS with a 5-year recovery period.

ASSIGNMENT SHEET #1

FORM 3.3 **PAGE** **DEPRECIATION SCHEDULE ______________________** **LIVESTOCK FOR BREEDING**

LINE	Date Acquired	Item Description	Head in Lot When Acq.	Investment Credit	New or Used	PER HEAD DATA						START OF 19___					END OF				LINE
												Per Head		Head	Per Lot		Per Head		Head		
						Cost Basis	Adjustments	Balance for Deprec.	Life	Method	Annual Deprec. % or $	Deprec. in Prior Years	Remaining Book Value	On Hand	Deprec. in Prior Years	Remaining Book Value	Deprec. This Year	Remaining Book Value	Sold or Died	On Hand	
1																					1
2																					2
3																					3
4																					4
5																					5
6																					6
7																					7
8																					8
9																					9
10																					10
11																					11

FORM 3.4 **PAGE** **DEPRECIATION SCHEDULE ______________________** **LIVESTOCK FOR BREEDING (CONT'D)**

LINE	19___		END OF 19___						END OF 19___						ESTIMATED CURRENT CASH VALUE				LINE
	Per Lot		Per Head		Head		Per Lot		Per Head		Head		Per Lot		Per Lot				
	Deprec. This Year	Remaining Book Value	Deprec. This Year	Remaining Book Value	Sold or Died	On Hand	Deprec. This Year	Remaining Book Value	Deprec. This Year	Remaining Book Value	Sold or Died	On Hand	Deprec. This Year	Remaining Book Value	Start 19___	End 19___	End 19___	End 19___	
1																			1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11

ASSIGNMENT SHEET #1

PART III — REAL ESTATE INVESTMENT AND DEPRECIATION RECORD

(NOTE: A 160-acre farm was purchased in January, 1976. Purchases and buildings in service prior to 1981 are already entered. Round all dollar figures to the nearest dollar.)

A. Built a farrowing house and placed in service August 29, 1982. Total cost was $15,000; used straight-line ACRS method with a twelve-year recovery period. Depreciation taken in prior years totaled $1,875.

B. Built a farm shop building and placed in service April 1, 1983. Total cost was $8,500; used regular ACRS method. Depreciation taken in prior years totaled $765.

C. Installed grain bin on March 31, 1984, for a cost of $12,000; used straight-line ACRS with a twelve-year recovery period.

D. Built a multipurpose farm building and placed in service June 18, 1984. Total cost was $6,000; used straight-line ACRS with a fifteen-year recovery period.

ASSIGNMENT SHEET #1

FORM 3.5

REAL ESTATE INVESTMENT AND DEPRECIATION RECORD

Tract No. ________ Date Acquired 1/76

Legal Description ________

Other Description 160 Acres

Original Basis Allocated to Land:

Purchase price, carry over basis, other (A) $20,000.00

Settlement fees (B) ________

Debt assumed (C) $80,000.00

Other (D) ________

Total Original Basis (Add Lines A thru D) (E) $100,000.00

less portion of basis allocated to buildings and improvements (F) $12,000.00

less reductions in basis (G) ________

Original Basis Allocated to Land (Line E minus F minus G) (H) $88,000.00

Date Acquired	ITEM DESCRIPTION (kind, size, location) Buildings & Improvements	Investment Credit	Total Cost Basis	Life	Method	Annual Deprec. % or $	Deprec. Taken in Prior Years	Rem. Val. at Start of Year	End 19___		End 19___		ESTIMATED CURRENT VALUE		Line
									Deprec. This Year	Rem. Book Value	Deprec. This Year	Rem. Book Value	End 19___	End 19___	
1/76	Machinery Shed		12,000	15	SL	800	6,400	5,600	800	4,800	800	4,000			1
7/77	Fences		7,500	15	SL	500	3,250	4,250	500	3,750	500	3,250			2
															3
															4
															5
															6
															7
															8
															9
															10
	Total Bldg. & Improv.														11
	Land							88,000		88,000		88,000			12
	Total (11 + 12)														13

DEPRECIATION
UNIT IV

ASSIGNMENT SHEET #2 — COMPLETE A DEPRECIATION SCHEDULE FOR MANAGEMENT PURPOSES

NAME ______________________________ SCORE ____________

The purpose of this assignment sheet is to familiarize the cooperator with depreciation for management purposes. Some cooperators will want to use a depreciation schedule to determine current inventory values.

Use the following information to complete a depreciation schedule for management purposes. Assume that the starting year is 1984.

PART I — MACHINERY AND EQUIPMENT

(NOTE: Round all dollar figures to the nearest dollar.)

A. Purchased new tractor on January 2, 1979, for $22,000. Assumed a useful life of eight years, and used the double declining balance method. Additional first year depreciation was taken. Depreciation taken in prior years was $13,728. Salvage value was less than 10 percent of the basis.

B. Purchased used plow on January 2, 1979, for $1,500 cash difference plus trade-in of an old plow with a book value of $1,000. Assumed a useful life of seven years and used the straight-line method. No additional first year depreciation was taken, and salvage value was estimated at $400. Depreciation taken in prior years was $1,500.

C. Purchased new 3/4-ton truck on September 1, 1980, for $9,500 boot paid plus trade-in of old pickup with a depreciable balance of $2,500. Assumed a useful life of four years and used the double declining balance method. No additional first year depreciation was taken, and salvage value was estimated at $1,500. Depreciation taken in prior years was $10,500.

D. Purchased new offset disk on October 1, 1980, for $5,100. Assumed a useful life of seven years and used the straight-line method. Additional first year depreciation was taken. Salvage value was less than 10 percent of the basis. Depreciation taken in prior years was $1,895.

E. Purchased used springtooth from cooperator's dad on July 1, 1981, for $1,000. Dad used straight-line method. Useful life is five years. No additional first year depreciation was taken. Salvage was less than 10 percent of the basis. Depreciation taken in prior years was $500.

ASSIGNMENT SHEET #2

FORM 3.1 **PAGE** **DEPRECIATION SCHEDULE:** ____________________ **MACHINERY AND EQUIPMENT**

LINE	DATE ACQUIRED	ITEM DESCRIPTION	ID NO	NEW OR USED	INVEST. CREDIT	COST INFORMATION			ADDITL. FIRST YEAR DEPREC.	SALVAGE VALUE	DEPRECIATION INFORMATION					LINE
		KIND OF MACHINE, MAKE, MODEL, SIZE				REM'NG BOOK VALUE OF TRADE-IN	CASH DIFF PAID	TOTAL COST BASIS			BALANCE FOR REGULAR DEPREC.	LIFE	METHOD	ANNUAL DEPREC % or $	DEPREC. TAKEN IN PRIOR YEARS	
1																1
2																2
3																3
4																4
5																5
6																6
7																7
8																8
9																9
10																10
11																11

FORM 3.2 **PAGE** **DEPRECIATION SCHEDULE:** ________________ **MACHINERY AND EQUIPMENT (CONT'D)**

LINE	START 19___	END 19___		END 19___		END 19___		ESTIMATED CURRENT CASH VALUE			
	REMAINING BK. VAL AT START OF YEAR	DEPREC THIS YEAR	REMAINING BOOK VALUE	DEPREC THIS YEAR	REMAINING BOOK VALUE	DEPREC THIS YEAR	REMAINING BOOK VALUE	START 19___	END 19___	END 19___	END 19___
1											
2											
3											
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6											
7											
8											
9											
10											
11											

ASSIGNMENT SHEET #2

PART II — LIVESTOCK FOR BREEDING

(NOTE: Only purchased breeding livestock should be entered. Round dollar figures to two decimal places. Complete only per head calculations for period after start of 1984.)

A. Purchased twenty-five springer heifers on March 1, [illegible] for [illegible]0 each for a total cost of $10,000. Assumed a useful life of eight years, and used the straight-line method. Salvage value of $300 per head was used. Depreciation taken in prior years was $47.92 per head and $1,198 for the lot. Twenty-five head were on hand at the start of 1984.

B. Purchased two bulls on September 1, 1980, for $750 each for a total cost of $1,500. Assumed a useful life of five years, and used the straight-line method. Salvage value was estimated to be $350 per head. Depreciation taken in prior years was $266.67 per head for a total of $533.34. Two head were on hand at the start of 1984.

C. Purchased twenty-five four-year-old cows from cooperator's dad on July 1, 1982, for $500 each for a total cost of $12,500. Assumed a useful life of five years and used the straight-line method. Salvage value was estimated at $300 per head. Depreciation taken in prior years was $60 per head for a total of $1,500. Twenty-five head were on hand at the start of 1984.

ASSIGNMENT SHEET #2

FORM 3.3 **PAGE** **DEPRECIATION SCHEDULE** ____________________ **LIVESTOCK FOR BREEDING**

LINE	Date Acquired	Item Description	Head in Lot When Acq.	Investment Credit	New or Used	PER HEAD DATA						START OF 19___					END OF				LINE
												Per Head		Head	Per Lot		Per Head		Head		
						Cost Basis	Salvage Value	Balance for Deprec.	Life	Method	Annual Deprec. % or $	Deprec. in Prior Years	Remaining Book Value	On Hand	Deprec. in Prior Years	Remaining Book Value	Deprec. This Year	Remaining Book Value	Sold or Died	On Hand	
1																					1
2																					2
3																					3
4																					4
5																					5
6																					6
7																					7
8																					8
9																					9
10																					10
11																					11

FORM 3.4 **PAGE** **DEPRECIATION SCHEDULE** ____________________ **LIVESTOCK FOR BREEDING (CONT'D)**

LINE	19___		END OF 19___						END OF 19___						ESTIMATED CURRENT CASH VALUE				LINE
	Per Lot		Per Head		Head		Per Lot		Per Head		Head		Per Lot		Per Lot				
	Deprec. This Year	Remaining Book Value	Deprec. This Year	Remaining Book Value	Sold or Died	On Hand	Deprec. This Year	Remaining Book Value	Deprec. This Year	Remaining Book Value	Sold or Died	On Hand	Deprec. This Year	Remaining Book Value	Start 19___	End 19___	End 19___	End 19___	
1																			1
2																			2
3																			3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11

ASSIGNMENT SHEET #2

PART III — REAL ESTATE INVESTMENT AND DEPRECIATION RECORD

(NOTE: Parcel of land was purchased for $100,000 on January 12, 1976. Round all figures to nearest dollar.)

A. Appraised machinery shed on land at time of purchase at $12,000. Assumed a fifteen-year useful life, and used the straight-line depreciation method. Depreciation taken in prior years totaled $6,400.

B. Placed in service on July 7, 1977, two miles of new fence with a total cost of $7,500. Assumed a fifteen-year useful life, and used the straight-line method. Depreciation taken in prior years totaled $3,250.

ASSIGNMENT SHEET #2

FORM 3.5

REAL ESTATE INVESTMENT AND DEPRECIATION RECORD

Tract No. ________ Date Acquired 1/76

Legal Description ________

Other Description 160 Acres

Original Basis Allocated to Land:

Purchase price, carry over basis, other (A) $20,000.00

Settlement fees (B) ________

Debt assumed (C) $80,000.00

Other (D) ________

Total Original Basis (Add Lines A thru D) (E) $100,000.00

less portion of basis allocated to buildings and improvements (F) $12,000.00

less reductions in basis (G) ________

Original Basis Allocated to Land (Line E minus F minus G) (H) $88,000.00

Date Acquired	ITEM DESCRIPTION (kind, size, location) Buildings & Improvements	Investment Credit	Total Cost Basis	Life	Method	Annual Deprec. % or $	Deprec. Taken in Prior Years	Rem. Val. at Start of Year	End 19___		End 19___		ESTIMATED CURRENT VALUE		Line
									Deprec. This Year	Rem. Book Value	Deprec. This Year	Rem. Book Value	End 19___	End 19___	
															1
															2
															3
															4
															5
															6
															7
															8
															9
															10
	Total Bldg. & Improv.														11
	Land														12
	Total (11 + 12)														13

DEPRECIATION
UNIT IV

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1 — See following pages

Assignment Sheet #2 — See following pages

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1 — Part I

FORM 3.1 **PAGE** **DEPRECIATION SCHEDULE:** ____________ **MACHINERY AND EQUIPMENT**

LINE	DATE ACQUIRED	ITEM DESCRIPTION KIND OF MACHINE, MAKE, MODEL, SIZE	ID NO	NEW OR USED	INVEST CREDIT	COST INFORMATION			EXPENSE ELECTION	BASIC ADJUST.	DEPRECIATION INFORMATION					LINE
						REM'NG BOOK VALUE OF TRADE-IN	CASH DIFF PAID	TOTAL COST BASIS			BALANCE FOR REGULAR DEPREC	LIFE	METHOD	ANNUAL DEPREC % or $	DEPREC. TAKEN IN PRIOR YEARS	
1	9/82	1/2-Ton Pickup		N		1,500	9,200	10,700	—		10,700	3	Regular ACRS		6,741	1
2	10/82	Automobile (farm share)		N		—	5,100	5,100	—		5,100	3	Regular ACRS		3,213	2
3	3/83	Tractor		N		12,000	33,000	45,000	5,000		40,000	5	ST. LINE ACRS		4,000	3
4	3/83	Plow		N		500	5,000	5,500	—		5,500	5	ST. LINE ACRS		550	4
5	12/83	Cotton Modular Builder		U		—	21,000	21,000	—		21,000	5	ST. LINE ACRS		2,100	5
6	9/84	Plow		N		4,950	1,500	6,450	—		6,450	5	Regular ACRS		—	6
7	10/84	Chisel		U			5250	5,250	5,000		250	5	Regular ACRS		—	7
8																8
9																9
10																10
11																11

FORM 3.2 **PAGE** **DEPRECIATION SCHEDULE:** ____________ **MACHINERY AND EQUIPMENT (CONT'D)**

LINE	START 19 84	END 19 84		END 19 85		END 19 86		ESTIMATED CURRENT CASH VALUE			
	REMAINING BK VAL AT START OF YEAR	DEPREC THIS YEAR	REMAINING BOOK VALUE	DEPREC THIS YEAR	REMAINING BOOK VALUE	DEPREC THIS YEAR	REMAINING BOOK VALUE	START 19__	END 19__	END 19__	END 19__
1	3,959	3,959	-0-		-0-		-0-				
2	1,887	1,887	-0-		-0-		-0-				
3	36,000	8,000	28,000	8,000	20,000	8,000	12,000				
4	4,950	TRADED ~~1,100~~	9/84 ~~3,850~~	~~1,100~~	~~2,750~~	~~1,100~~	~~1,650~~				
5	13,900	4,200	14,700	4,200	10,500	4,200	6,300				
6	—	967.50	5,482.50	1,419	4,063.50	1,354.50	2,7[illegible]9				
7	—	37.50	212.[illegible]	55	157.50	52.50	105				
8											
9											
10											
11											

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ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1 — Part II

FORM 3.3 **PAGE** **DEPRECIATION SCHEDULE** ________ **LIVESTOCK FOR BREEDING**

LINE	Date Acquired	Item Description	Head in Lot When Acq.	Investment Credit	New or Used	PER HEAD DATA						START OF 19 84					END OF				LINE
												Per Head		Head	Per Lot		Per Head		Head		
						Cost Basis	Adjustments	Balance for Deprec	Life	Method	Annual Deprec % or $	Deprec in Prior Years	Remaining Book Value	On Hand	Deprec in Prior Years	Remaining Book Value	Deprec This Year	Remaining Book Value	Sold or Died	On Hand	
1	1/82	Beef Cows	10		U	400	—	400	5	ST.	LINE ACRS	120	280	10	1200	2800	80	200		10	1
2	3/83	Bulls	2		N	750	—	750	5	ST	LINE ACRS	75	675	2	150	1350	150	525		2	2
3	9/83	GILTS (BRED)	10		N	500	—	500	3	Regular	ACRS	125	375	10	1250	3750	190	185	4	6	3
4	10/83	Boar	1		N	1,000	—	1,000	3	Regular	ACRS	250	750	1	250	750	380	370		1	4
5	4/84	Gilts (Bred)	4		N	500	—	500	5	ST.	LINE ACRS	—	—	—	—	—	50	450		4	5
6																					6
7																					7
8																					8
9																					9
10																					10
11																					11

FORM 3.4 **PAGE** **DEPRECIATION SCHEDULE** ________ **LIVESTOCK FOR BREEDING (CONT'D)**

LINE	19 84		END OF 19 85						END OF 19 86						ESTIMATED CURRENT CASH VALUE				LINE
	Per Lot		Per Head		Head		Per Lot		Per Head		Head		Per Lot		Per Lot				
	Deprec This Year	Remaining Book Value	Deprec This Year	Remaining Book Value	Sold or Died	On Hand	Deprec This Year	Remaining Book Value	Deprec This Year	Remaining Book Value	Sold or Died	On Hand	Deprec This Year	Remaining Book Value	Start 19___	End 19___	End 19___	End 19___	
1	800	2,000	80	120					80	40									1
2	300	1,050	150	375					150	225									2
3	1,140	1,110	185	-0-						-0-									3
4	380	370	370	-0-						-0-									4
5	200	1,800	100	350					100	250									5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11

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ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1 — Part III

FORM 5.5 **REAL ESTATE INVESTMENT AND DEPRECIATION RECORD**

Tract No. ________ Date Acquired 1/76

Legal Description ________

Other Description 160 Acres

Original Basis Allocated to Land:

Purchase price, carry over basis, other (A) $20,000.00

Settlement fees (B) ________

Debt assumed (C) $80,000.00

Other (D) ________

Total Original Basis (Add Lines A thru D) (E) $100,000.00

less portion of basis allocated to buildings and improvements (F) $12,000.00

less reductions in basis (G) ________

Original Basis Allocated to Land (Line E minus F minus G) (H) $88,000.00

Date Acquired	ITEM DESCRIPTION (kind, size, location) Buildings & Improvements	Investment Credit	Total Cost Basis	Life	Method	Annual Deprec. % or $	Deprec. Taken in Prior Years	Rem. Val. at Start of Year	End 1984		End 1985		ESTIMATED CURRENT VALUE		Line
									Deprec. This Year	Rem. Book Value	Deprec. This Year	Rem. Book Value	End 19___	End 19___	
1/76	Machinery Shed		12,000	15	SL	800	6,400	5,600	800	4,800	800	4,000			1
7/77	Fences		7,500	15	SL	500	3,250	4,250	500	3,750	500	3,250			2
8/82	Farrowing House		15,000	12	ST. LINE ACRS		1,875	13,125	1,250	11,875	1,250	10,625			3
4/83	Shop Building		8,500	15	Regular ACRS		765	7,735	935	6,800	765	6,035			4
3/84	Grain Bin		12,000	12	ST. LINE ACRS		—	—	500	11,500	1,000	10,500			5
6/84	Multi-Purpose Building		6,000	15	ST. LINE ACRS		—	—	233	5,767	400	5,367			6
															7
															8
															9
															10
	Total Bldg. & Improv.														11
	Land							88,000		88,000		88,000			12
	Total (11 + 12)														13

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ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #2 — Part I

FORM 3.1 **PAGE** **DEPRECIATION SCHEDULE:** ____________ **MACHINERY AND EQUIPMENT**

LINE	DATE ACQUIRED	ITEM DESCRIPTION KIND OF MACHINE, MAKE, MODEL, SIZE	ID NO	NEW OR USED	INVEST CREDIT	COST INFORMATION REM'NG BOOK VALUE OF TRADE-IN	CASH DIFF PAID	TOTAL COST BASIS	ADDITL FIRST YEAR DEPREC	SALVAGE VALUE	DEPRECIATION INFORMATION BALANCE FOR REGULAR DEPREC	LIFE	METHOD	ANNUAL DEPREC % or $	DEPREC. TAKEN IN PRIOR YEARS	LINE
1	1/79	Tractor		N		—	22,000	22,000	4,000	—	18,000	8	DDB	25%	13,728	1
2	1/79	Plow		U		1,000	1,500	2,500	—	400	2,100	7	SL	$300	1,500	2
3	9/80	Truck 3/4 ton		N		2,500	9,500	12,000	—	1,500	10,500	4	DDB	50%	10,500	3
4	10/80	Offset Disk		N		—	5,100	5,100	1,020	—	4,080	7	SL	$583	1,995	4
5	7/81	Springtooth (from Dad)		U			1,000	1,000			1,000	5	SL	200	500	5
6																6
7																7
8																8
9																9
10																10
11																11

FORM 3.2 **PAGE** **DEPRECIATION SCHEDULE:** ____________ **MACHINERY AND EQUIPMENT (CONT'D)**

LINE	START 19 84	END 19 84		END 19 85		END 19 86		ESTIMATED CURRENT CASH VALUE			
	REMAINING BK. VAL AT START OF YEAR	DEPREC THIS YEAR	REMAINING BOOK VALUE	DEPREC THIS YEAR	REMAINING BOOK VALUE	DEPREC THIS YEAR	REMAINING BOOK VALUE	START 19__	END 19__	END 19__	END 19__
1	4,272	1,068	3,204	801	2,403	601	1,802				
2	1,000	300	700	300	400	—	400				
3	1,500	—	1,500	—	1,500	—	1,500				
4	2,185	583	1,602	583	1,019	583	436				
5	500	200	300	200	100	100	-0-				
6											
7											
8											
9											
10											
11											

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Assignment Sheet #2 — Part II

ANSWERS TO ASSIGNMENT SHEETS

FORM 3.3 **PAGE** **DEPRECIATION SCHEDULE** ____________ **LIVESTOCK FOR BREEDING**

						PER HEAD DATA						START OF 19 84					END OF				
												Per Head		Head	Per Lot		Per Head		Head		
LINE	Date Acquired	Item Description	Head in Lot When Acq	Investment Credit	New or Used	Cost Basis	Salvage Value	Balance for Deprec	Life	Method	Annual Deprec % or $	Deprec in Prior Years	Remaining Book Value	On Hand	Deprec in Prior Years	Remaining Book Value	Deprec This Year	Remaining Book Value	Sold or Died	On Hand	LINE
1	3/80	Heifers	25		N	400	300	100	8	SL	12.50	47.92	352.08	25	1,198.00	8,802.00	12.50	339.58			1
2	9/80	Bulls	2		U	750	350	400	5	SL	80.00	266.67	483.33	2	533.34	966.66	80.00	403.33			2
3	7/82	Cows (Dad)	25		U	500	300	200	5	SL	40.00	60.00	440.00	25	1,500.00	11,000.00	60.00	380.00			3
4																					4
5																					5
6																					6
7																					7
8																					8
9																					9
10																					10
11																					11

FORM 3.4 **PAGE** **DEPRECIATION SCHEDULE** ____________ **LIVESTOCK FOR BREEDING (CONT'D)**

	19 84		END OF 19 85						END OF 19 86						ESTIMATED CURRENT CASH VALUE				
	Per Lot		Per Head		Head		Per Lot		Per Head		Head		Per Lot		Per Lot				
LINE	Deprec This Year	Remaining Book Value	Deprec This Year	Remaining Book Value	Sold or Died	On Hand	Deprec This Year	Remaining Book Value	Deprec This Year	Remaining Book Value	Sold or Died	On Hand	Deprec This Year	Remaining Book Value	Start 19__	End 19__	End 19__	End 19__	LINE
1			12.50	327.08					12.50	314.58									1
2			33.33	350.00					—	350.00									2
3			60.00	320.00					20.00	300.00									3
4																			4
5																			5
6																			6
7																			7
8																			8
9																			9
10																			10
11																			11

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #2 — Part III

FORM 3.5 **REAL ESTATE INVESTMENT AND DEPRECIATION RECORD**

Tract No. ________ Date Acquired 1/76

Legal Description ________

Other Description 160 Acres

Original Basis Allocated to Land:

Purchase price, carry over basis, other (A) $20,000.00

Settlement fees (B) ________

Debt assumed (C) $80,000.00

Other (D) ________

Total Original Basis (Add Lines A thru D) (E) $100,000.00

less portion of basis allocated to buildings and improvements (F) $12,000.00

less reductions in basis (G) ________

Original Basis Allocated to Land (Line E minus F minus G) (H) $88,000.00

Date Acquired	ITEM DESCRIPTION (kind, size, location) Buildings & Improvements	Investment Credit	Total Cost Basis	Life	Method	Annual Deprec. % or $	Deprec. Taken in Prior Years	Rem. Val. at Start of Year	End 19 84		End 19 85		ESTIMATED CURRENT VALUE		Line
									Deprec. This Year	Rem. Book Value	Deprec. This Year	Rem. Book Value	End 19___	End 19___	
1/76	Machinery Shed		12,000	15	SL	800	6,400	5,600	800	4,800	800	4,000			1
7/77	Fences (2 miles)		7,500	15	SL	500	3,250	4,250	500	3,750	500	3,250			2
															3
															4
															5
															6
															7
															8
															9
															10
	Total Bldg. & Improv.														11
	Land							88,000		88,000		88,000			12
	Total (11 + 12)														13

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DEPRECIATION
UNIT IV

TEST

NAME ____________________ SCORE ____________

1. Match terms associated with depreciation to their correct definitions. Write the correct numbers in the blanks. Definitions are continued on the next page.

_____a. Estimated value of an asset when it is no longer useful in the farm business or in the production of income

_____b. Asset that gives productive service to the farm business over a period longer than one year

_____c. Credit against or reduction in federal income tax

_____d. Cash paid in addition to trade-in

_____e. Percentage of an asset's cost to be recovered each year

_____f. Method of prorating the cost of a working asset over its useful life

_____g. Value of an asset to be depreciated

_____h. Treatment of each property as placed in service on the first day of the last half of the first year of use, regardless of the month of acquisition

_____i. Period over which the asset is expected to be useful in the farm business or in the production of income

_____j. Property that has no material characteristics but is merely the evidence of value

_____k. Most tangible, depreciable property acquired after 1980

_____l. Measure of owner's investment in owned property

1. Accelerated Cost Recovery System (ACRS)
2. Useful life
3. Half-year convention
4. Depreciable balance
5. Depreciation
6. Basis
7. Cash difference
8. Adjusted tax basis
9. Salvage value
10. Working asset
11. Recovery property
12. Investement tax credit
13. Tangible property
14. Intangible property
15. Depreciation schedule
16. Annual recovery

TEST

______m. Material property that can be felt or touched

______n. Depreciation methods that apply to farm properties acquired during or after 1981

______o. Original cost of an asset plus the value of improvements or alterations less the cost of depreciation, losses, or depletion

______p. Form summarizing original cost, prior depreciation allowances taken, adjustments to basis, current depreciation, remaining value for each asset, and method of prorating cost of capital assets over their useful life

2. State the purposes of depreciating an asset.

a. ____

b. ____

c. ____

3. Select from the following list major causes of depreciation. Write an "X" in the blank before each correct answer.

______a. Production due to poor yields

______b. Obsolescence due to new technology

______c. Wear and tear due to use

______d. Deterioration due to elements of nature

______e. Land due to erosion

4. State rules for determining farm property subject to depreciation.

a. ____

____

____

b. ____

____

____

TEST

5. Select from the following list property that qualifies for depreciation. Write an "X" in the blank before each correct answer.

_____a. Farm machinery and equipment

_____b. Livestock acquired for work, breeding, or dairy purposes

_____c. Land

_____d. Farm buildings

_____e. Raised livestock

_____f. Other physical farm property

6. State information to know before figuring depreciation.

a. ____

b. ____

c. ____

7. Name cost recovery methods allowed under ACRS of 1981.

a. ____

b. ____

8. Select from the following list facts about ACRS of 1981. Write an "X" in the blank before each correct answer.

_____a. Additional first year depreciation may be taken

_____b. Salvage value is disregarded

_____c. Methods and periods are different for new and used property

_____d. Methods and periods are the same for both new and used property

_____e. No depreciation is allowed in the year personal property is disposed of

_____f. Cost is recovered over a three-year, five-year, ten-year, or fifteen-year period

_____g. Salvage value must be considered

_____h. Part-year depreciation for real property is determined by the number of months item was owned

_____i. In a given year, the same recovery period must be used for all personal property of a class for which such election is made

TEST

9. Name the classes of recovery property.

a. ____________________

b. ____________________

c. ____________________

d. ____________________

10. Distinguish between regular accelerated cost recovery system (ACRS) for personal property and for real property. Write a "P" for personal property and an "R" for real property.

______a. Annual cost recovery is determined by multiplying the statutory percentage for the month purchased by the property's cost basis

______b. Cost recovery is determined by multiplying the statutory percentage for the respective class of property by the item's cost basis

11. State the straight-line ACRS optional recovery periods.

In case of —	You may elect a recovery period of —
Three-year property	a. ____________________
Five-year property	b. ____________________
Ten-year property	c. ____________________
Fifteen-year property	d. ____________________

12. Distinguish between straight-line ACRS for personal property and for real property. Write a "P" for personal property and an "R" for real property.

______a. Annual cost recovery is determined by dividing the original cost basis by the regular or optional longer recovery period; first year's cost recovery is dependent upon month purchased

______b. Annual cost recovery is determined by dividing the original cost basis by the regular or optional longer recovery period; the first year's cost recovery is independent of date purchased

TEST

13. Complete the cost recovery guidelines and asset classifications for Economic Recovery Act of 1981 by completing the chart below.

General Information						**Regular (ACRS)**		**Straight-Line (ACRS)**	
Property Description	*Code Section*	*ADR*	*Investment Credit Percent*	*First Year Recovery**	*Recovery in Year of Disposal*	*Recovery Period or Estimated Life*	*Depreciation Recapture Ordinary Income*	*Recovery Period or Estimated Life*	*Depreciation Recapture Ordinary Income*
Automobiles	1245	3	6	½ year	None	a.__________	Yes	3, 5, 12	Yes
Pickup ¼ light trucks less than 13,000 #GVW	1245	3	6	½ year	b.__________	3	Yes	3, 5, 12	Yes
Trucks greater than 13,000 #GVW	1245	6	10	½ year	None	c.__________	Yes	5, 12, 15	d.__________
Breeding Swine	1245	3	6	½ year	None	3	Yes	e.__________	Yes
Breeding cattle (dairy & beef)	1245	7	10	½ year	None	f.__________	Yes	5, 12, 25	Yes
Breeding sheep	1245	5	10	½ year	None	5	g.__________	h.__________	Yes
Breeding horses		10	0	½ year	None	i.__________	Yes	5, 12, 25	Yes
Single purpose ag structures (grain bins, hay storage, silage storage)	1245	10	10	½ year	j.__________	k.__________	Yes	5, 12, 25	l.__________
Orchard	1245	20	10	½ year	None	5	m.__________	5, 12, 25	Yes
Ag machinery and equipment	1245	10	10	½ year	None	n.__________	Yes	o.__________	Yes
Fences	1245	10	10	½ year	p.__________	5	Yes	5, 12, 25	q.__________
Water systems	1245		10	½ year	None	r.__________	Yes	5, 12, 25	Yes
Mobile homes			0	½ year	None	10	Yes	s.__________	No
Nonresidential farm buildings	1250	25	0	Prop(B)	Prop(B)	t.__________	Yes	15, 35, 45	u.__________
Residential farm buildings	1250	25	0	Prop(B)	Prop(B)	v.__________	(A)	15, 35, 45	No

*Half year convention built into tables for regular ACRS

(A) = Amount in excess of straight-line fifteen year is recaptured as ordinary income. (B) = Recovery is equal to the portion of the year (in months) asset is in service.

TEST

14. Select from the following list characteristics of expense option. Write an "X" in the blank before each correct answer.

______a. Is limited in amount

______b. Applies to purchases of tangible personal property that qualifies for investment credit

______c. Applies to inherited property

______d. Does not allow investment credit on the cost of property expensed under this election

______e. Requires recapture of full expensed amount in the year of sale of disposed property

______f. May be applied to property acquired from related parties

______g. Stipulates that property must be purchased for use in trade or business

15. Match to their corect descriptions methods of computing depreciation for management purposes.

______a. Method of calculating depreciation in which total depreciation is spread evenly over life of asset	1. Straight-line 2. Sum-of-the-years digits
______b. Method of calculating depreciation in which annual depreciation is taken to be a constant proportion of each year's adjusted basis	3. Declining-balance
______c. Method of calculating depreciation in which the rate of annual depreciation declines as asset becomes older	

(NOTE: Test questions 16 and 17 list the assignment sheets. They are an important part of this test. If they have not been completed, check with your instructor.)

16. Complete a depreciation schedule for income tax purposes.

17. Complete a depreciation schedule for management purposes.

DEPRECIATION
UNIT IV

ANSWERS TO TEST

1.

a.	9	i.	2
b.	10	j.	14
c.	12	k.	11
d.	7	l.	6
e.	16	m.	13
f.	5	n.	1
g.	4	o.	8
h.	3	p.	15

2. a. Estimating annual noncash expense
   b. Adjusting taxable income
   c. Determining book value

3. b, c, d

4. a. Allow reasonable deductions for the exhaustion, wear, and tear of property used in a trade or business, or of property held for the production of income
   b. Include all assets that are used in the business of farming and that have a determined useful life of more than one year

5. a, b, d, f

6. a. Your basis in the property
   b. When the property was placed in service
   c. Which method of depreciation you elect to use

ANSWERS TO TEST

7. a. Regular Accelerated Cost Recovery System
   b. Straight-Line Accelerated Cost Recovery System

8. b, d, e, f, h, i

9. a. Three-year property
   b. Five-year property
   c. Ten-year property
   d. Fifteen-year property

10. a. R
    b. P

11. a. 3, 5, or 12 years
    b. 5, 12, or 25 years
    c. 10, 25, or 35 years
    d. 15, 35, or 45 years

12. a. R
    b. P

13. a. 3
    b. None
    c. 5
    d. Yes
    e. 3, 5, 12
    f. 5
    g. Yes
    h. 5, 12, 25
    i. 5
    j. None
    k. 5
    l. Yes
    m. Yes
    n. 5
    o. 5, 12, 25
    p. None
    q. Yes
    r. 5
    s. 10, 25, 35
    t. 15
    u. No
    v. 15

ANSWERS TO TEST

14. a, b, d, e, g

15. a. 1
    b. 3
    c. 2

16. Evaluated to the satisfaction of the instructor

17. Evaluated to the satisfaction of the instructor

ENTERPRISE ACCOUNTING AND SUPPLEMENTAL RECORDS
UNIT V

UNIT OBJECTIVE

After completing this unit, the cooperator should be able to record livestock and crop enterprise and supplemental data for a year-end detailed enterprise analysis. The cooperator will show this knowledge by completing the assignment sheets and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the cooperator should be able to

1. Match to their correct definitions terms associated with enterprise accounting and supplemental records.
2. State purposes of enterprise accounting.
3. Match to their correct descriptions ways to classify enterprises for an enterprise record and analysis.
4. State guidelines for allocating farm receipts and expenditures to various enterprises.
5. Select from a list guidelines for allocating entries to overhead enterprise.
6. State purposes for keeping supplemental records.
7. Match types of supplemental records to their appropriate uses.
8. Determine what farm business enterprises will be used for enterprise records and analysis.
9. Post on the proper enterprise record monthly transactions for farm receipts and expenditures.
10. Complete an enterprise cash flow summary.
11. Complete a crop and feed balance record form.
12. Complete a livestock production summary.
13. Complete a crop production summary.
14. Complete a monthly labor summary.

ENTERPRISE ACCOUNTING AND SUPPLEMENTAL RECORDS
UNIT V

SUGGESTED ACTIVITIES

I. Unit contents

  A. Objective sheet

  B. Suggested activities

  C. Information sheet

  D. Assignment sheets

    1. Assignment Sheet #1 — Determine What Farm Business Enterprises Will Be Used for Enterprise Records and Analysis

    2. Assignment Sheet #2 — Post on the Proper Enterprise Record Monthly Transactions for Farm Receipts and Expenditures

    3. Assignment Sheet #3 — Complete an Enterprise Cash Flow Summary

    4. Assignment Sheet #4 — Complete a Crop and Feed Balance Record Form

    5. Assignment Sheet #5 — Complete a Livestock Production Summary

    6. Assignment Sheet #6 — Complete a Crop Production Summary

    7. Assignment Sheet #7 — Complete a Monthly Labor Summary

  E. Answers to assignment sheets

  F. Test

  G. Answers to test

II. Instructor's guide

  A. Make transparencies of appropriate supplemental record forms.

  B. Provide cooperators with objective sheet.

SUGGESTED ACTIVITIES

C. Discuss unit and specific objectives.

   1. Emphasize the importance of keeping complete and accurate records.

      EXAMPLES: Discuss state and area comparative enterprise analysis and compare with cooperators' answers. Do cooperators know the returns and cost of production for their farms' major enterprises?

   2. Discuss the need for a records system that can provide financial and supplemental information necessary to complete enterprise records.

D. Provide cooperators with information and assignment sheets.

E. Discuss information and assignment sheets.

   1. Discuss Objective 1, pointing out that a number of unfamiliar terms will be used in the unit.

   2. Discuss Objective 2, the purposes of enterprise accounting. Explain the importance of keeping complete financial and supplemental records necessary for keeping enterprise accounts.

   3. Use Assignment Sheet #1 to supplement discussion of Objective 3. Emphasize the importance of determining at the beginning of the accounting period the enterprise that will be used for analysis.

   4. Discuss Objective 4. Use transparencies of supplemental record forms to illustrate record forms that may be used to record monthly enterprise transactions. Point out that capital asset sales and purchases will also be allocated through changes in inventory. Emphasize that loans are cash flow and not income or expense.

   5. When discussing Objective 5, explain that no one method of allocating entries in the overhead enterprise applies universally, and that several methods may be applied to the various entries incurred in a single enterprise. Have cooperators complete Assignment Sheet #2 to learn how to allocate receipts and expenditures to an enterprise. Have cooperators complete Assignment Sheet #3 to learn how to compile monthly and yearly totals for use in completing a detailed enterprise analysis.

SUGGESTED ACTIVITIES

6. Discuss Objective 6. Explain that supplemental records normally include physical or production records and other items of special importance to an individual farm or ranch. A positive return for the farm business or detailed enterprise analysis comes partly as a result of wise choices concerning costs and prices of products, but also from efficient use of land, labor, feeds, and other materials. Complete records provide a basis for comparison of performance levels between enterprises and between farms as standards over time.

7. Use transparencies to illustrate various types of supplemental record forms. Explain that additional forms may be developed to satisfy the needs of an individual farm or ranch situation. Have cooperators complete Assignment Sheets #4 through #7 to learn what information is needed to supplement financial records for a year-end analysis of the farm business.

F. During scheduled on-farm instruction, assist cooperators in determining what supplemental records will be needed to meet their record system's objectives. Encourage cooperators to allocate receipts and expenditures each month to the enterprises they have selected for analysis.

G. Give test.

H. Critique test.

I. Reteach if necessary.

III. Unit references

A. Hodgens, Jim, and Leland Myers. *Farm Business Management Year 1.* Stillwater, Oklahoma: State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1979.

B. Hardin, Mike L., and Joseph E. Williams. *Oklahoma Young Farmer Record Book.* Stillwater, Oklahoma: State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1981.

ENTERPRISE ACCOUNTING AND SUPPLEMENTAL RECORDS
UNIT V

INFORMATION SHEET

1. Terms associated with enterprise accounting and supplemental records

   A. Enterprise accounting — Detailed recording of all income and expense items directly related to a specific enterprise

   B. Supplemental Records — Additional information to financial records that aids in providing a complete records system

   C. Production records — Information that normally details yield, production, or physical performance measures of an enterprise

   (NOTE: Production records are one type of supplemental records.)

   D. Enterprise — Unit of economic organization in the farm business

   EXAMPLES: Cow/calf, stocker cattle, swine, dairy replacement, wheat, alfalfa hay, cotton, peanuts, hay

II. Purposes of enterprise accounting

   A. Pinpointing level of profitability and factors affecting profitability during accounting period

   EXAMPLE: Records may show that feeding wheat is more profitable than selling wheat.

   B. Aiding cooperator in decision making by using historical records to reveal levels of performance from year to year

   EXAMPLES: DHIA records, feed records

   C. Determining management's performance through comparisons over a specific time period

   EXAMPLES: Implementation of new technology; upgrading of dairy herd based on DHIA records

III. Ways to classify enterprises for an enterprise record and analysis (Assignment Sheet #1)

   A. Major enterprise — Enterprise that contributes large portion of income to farm business

   EXAMPLES: Wheat, beef cattle, peanuts, dairy, swine

INFORMATION SHEET

B. Minor enterprise — Enterprise that contributes small portion of income to farm business

(NOTE: Minor enterprises will have little affect on the management decisions of the farm business.)

C. Overhead enterprise — Income and expenses that cannot be directly attributed to an enterprise at the time incurred

EXAMPLES: Real estate taxes, interest, utility bills, supplies

(NOTE: At the end of the accounting period, the items in the overhead enterprise account should be allocated among enterprises for analysis purposes.)

D. Detailed enterprise — Subdivision of a major enterprise

EXAMPLES: Divide hog enterprise into farrowing to weaning, and finishing; divide wheat enterprise by field or soil type; divide beef cattle enterprise into cow/calf, stockers, or finishing.

(NOTE: A more detailed subdivision of a major enterprise will require more work and record keeping, but the effort should be offset by a more thorough enterprise analysis.)

IV. Guidelines for allocating farm receipts and expenditures to various enterprises

A. Allocate farm receipts or expenditures to various enterprises when entering data in financial records

B. Enter as overhead enterprise farm receipts or expenditures that cannot be directly attributed to an enterprise

C. Be sure to allocate physical data to appropriate enterprise

EXAMPLES: Bushels, pounds, tons, head, acres

D. Allocate capital asset sales or purchases attributable to an enterprise

E. Do not allocate inflow or outflow from loans

EXAMPLES: Money borrowed, principal paid

F. Do not allocate nonfarm receipts or expenses

G. Allocate noncash expenses at end of accounting period

EXAMPLES: Depreciation, operator labor, unpaid family labor, opportunity costs, beginning and ending inventory

INFORMATION SHEET

H. Allocate internal transfers as they occur

EXAMPLE: Wheat pasture for stockers: Credit wheat enterprise for wheat pasture rent; debit stocker enterprise for wheat pasture rent or forage.

V. Guidelines for allocating entries to overhead enterprise (Assignment Sheets #2 and #3)

(NOTE: To analyze each enterprise, the cooperator should allocate among the farm business enterprises farm receipts and expenditures recorded in the overhead enterprise. No method is available that guarantees correct allocation of overhead entries.)

A. Allocate among enterprises in proportion to the income contributed by each enterprise to the total farm business

EXAMPLE: If wheat, swine, and cattle make up 40, 50, and 10 percent respectively of gross farm income, then divide overhead entries in that proportion.

B. Allocate building expenses according to the total space occupied by an enterprise

EXAMPLE: If dairy cows, sheep, and beef cattle each occupy one-third of a barn, divide the barn's overhead expenses in the same proportion.

C. Allocate crop expenses according to proportion of acres to total acres

EXAMPLE: If total crop acres equal 500 acres, and harvested wheat acres total 300 acres, allocate 60 percent of expenses to wheat.

(NOTE: The cooperator should also consider whether land is all of the same quality, whether land is interchangeable for different crops, and whether crops are dry land or irrigated.)

VI. Purposes of keeping supplemental records (Assignment Sheets #4-#7)

A. Supplementing financial records

(NOTE: Complete records provide a basis for comparison of performance levels or standards over time between enterprises and between farms. Supplemental records are not substitutes for financial records.)

B. Recording yields, production, and physical performance of an enterprise

C. Recording different production practices and weather conditions

D. Recording materials and resources used by the various enterprises

INFORMATION SHEET

VII. Types of supplemental records and their uses

A. Home-used products — Used for income tax reporting purposes and for balancing other supplemental records

(NOTE: If products used in the home are not considered, then production expenses may be overstated and returns understated.)

B. Breeding — Used for birth and weaning records and for planning livestock operations

C. Mortality — Used for keeping track of livestock deaths and causes of deaths

D. Livestock feeding — Used for recording feed consumption for livestock enterprises

(NOTE: Livestock feed records are among the most important statistical records if livestock production efficiency is to be measured. Feed costs account for 50 percent to 80 percent of the total cost of producing meat and other livestock products.)

E. Crop and feed balance — Used to calculate total quantities of feed fed

F. Livestock production summary — Used to summarize numbers, weights, and values of livestock for a year

G. Crop records — Used for keeping crop information by field or farm

(NOTE: Yield records are not very meaningful unless data surrounding particular yield levels are recorded.)

EXAMPLES: Previous crops, varieties, fertilizer rates, pesticides, peculiar weather, insects, disease, timing of rain

H. Crop production summary — Used to pull together yields for each crop, values, and total acres involved so that total production can be calculated

I. Labor — Used to summarize operator, family, and hired labor hours used by each enterprise

ENTERPRISE ACCOUNTING AND SUPPLEMENTAL RECORDS
UNIT V

ASSIGNMENT SHEET #1 — DETERMINE WHAT FARM BUSINESS ENTERPRISES WILL BE USED FOR ENTERPRISE RECORDS AND ANALYSIS

NAME ________________________ SCORE ____________

There are many different ways of breaking down a farm business operation for enterprise records and analysis. The cooperator must make a decision on how this will be done in order to keep enterprise records correctly. After establishing the enterprise breakdown, the cooperator will be able to develop a system of recording livestock, crop, and forage data on a monthly basis that can be summarized at the end of the year for analysis purposes.

PART I

List the enterprises in your farming or ranching operation.

EXAMPLES: Cow/calf, stockers, swine fattening, wheat, alfalfa hay, cotton

A. ____

B. ____

C. ____

D. ____

E. ____

PART II

Determine the enterprises in your farm business operation that will be used for enterprise records and analysis.

A. ____

B. ____

C. ____

D. ____

E. ____

F. ____

G. ____

ENTERPRISE ACCOUNTING AND SUPPLEMENTAL RECORDS
UNIT V

ASSIGNMENT SHEET #2 — POST ON THE PROPER ENTERPRISE RECORD MONTHLY TRANSACTIONS FOR FARM RECEIPTS AND EXPENDITURES

NAME ________________________________ SCORE ______________

Most cooperators will want to divide their farm business operation into major enterprises and keep track of the receipts, expenditures, and yields for each enterprise. However, some cooperators will separate their operation into a more detailed enterprise breakdown. More enterprises and more detailed enterprise subdivisions mean more work and record keeping, but the effort should result in a thorough detailed enterprise analysis at year's end.

PART I

Post on the proper enterprise record monthly transactions for farm receipts. Write your answers on the forms provided on the following pages.

(NOTE: Use the first column for the overhead enterprise. Column number (COL. NO.) refers to the column number on the farm receipts form in the *Oklahoma Young Farmers Record Book*.)

ASSIGNMENT SHEET #2

EXAMPLE

FORM 1.1 **PAGE** **MONTH** June 19____ **FARM RECEIPTS**

LINE	Date	TOTAL RECEIPTS $	¢	DETAILED DESCRIPTION to whom, what, etc.	AMOUNT: Pounds, Bushels, Tons, etc.	CROP SALES KIND: write in below Wheat $	¢	Alfalfa $	¢	$	¢	$	¢	LINE
				subtotals brought from proceeding page										
1	1	3500	00	Clinton Coop @ $3^{\underline{50}}$	1000 bu.	3500	00							1
2	3	742	95	Patronage refund										2
3	15	960	00	Alfalfa hay @ $80^{\underline{00}}$	12 tons			960	00					3
4														4
5														5
6														6
7														7
8														8
9														9
10														10
11														11
12														12
13														13
14														14
15														15
16														16
17														17
18														18
19														19
20														20
21														21
22														22
23														23
				subtotals to next page or totals to summary page										
						1		2		3		4		

BEST COPY AVAILABLE

ASSIGNMENT SHEET #2

EXAMPLE

FORM 1.6 PAGE MONTH 19____ DISTRIBUTION OF ENTERPRISE RECEIPTS

LINE	Overhead				Wheat				Alfalfa				LINE
	ITEM DESCRIPTION, QUANTITY, ETC.	COL. NO.	AMOUNT $	AMOUNT ¢	ITEM DESCRIPTION, QUANTITY, ETC.	COL. NO.	AMOUNT $	AMOUNT ¢	ITEM DESCRIPTION, QUANTITY, ETC.	COL. NO.	AMOUNT $	AMOUNT ¢	
	subtotals brought from preceding page												
1					1000 bu. @ 3⁵⁰	1	3500	00					1
2	Patronage refund	7	742	95									2
3									12 tons @ 80⁰⁰	2	960	00	3
4													4
5													5
6													6
7													7
8													8
9													9
10													10
11													11
12													12
13													13
14													14
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16													16
17													17
18													18
19													19
20													20
21													21
22													22
23													23
	subtotals to next page or monthly total												

ASSIGNMENT SHEET #2

FORM 1.1 **PAGE** **MONTH** July **19**____ **FARM RECEIPTS**

LINE	Date	TOTAL RECEIPTS		DETAILED DESCRIPTION to whom, what, etc.	AMOUNT: Pounds, Bushels, Tons, etc.	CROP SALES KIND: write in below								LINE
						Wheat								
		$	¢			$	¢	$	¢	$	¢	$	¢	
				subtotals brought from proceeding page										
1	8	35,000	00	Clinton Coop - wheat 10,000 bu. @ 3.50	10,000 bu.	35,000	00							1
2	15	1,000	00	wheat straw - 1000 bales @ 1.00	1,000 bales	1,000	00							2
3	19	550	00	Cull Dairy Cow - 1 hd.										3
4	25	14,385	00	Milk Sales - 1013 cwt. @ 14.00										4
5	25	7,500	00	Custom Work 500 acres @ 15.00										5
6	30	1,000	00	10 Mkt. Hogs @ 100 ea. (raised)										6
7														7
8														8
9														9
10														10
11														11
12														12
13														13
14														14
15														15
16														16
17														17
18														18
19														19
20														20
21														21
22														22
23														23
				subtotals to next page or totals to summary page										
						1		2		3		4		

ASSIGNMENT SHEET #2

FORM 1.6 **PAGE** **MONTH** **19___** **DISTRIBUTION OF ENTERPRISE RECEIPTS**

LINE	Overhead				Wheat				Dairy Cows				LINE
	ITEM DESCRIPTION, QUANTITY, ETC.	COL. NO.	AMOUNT		ITEM DESCRIPTION, QUANTITY, ETC.	COL. NO.	AMOUNT		ITEM DESCRIPTION, QUANTITY, ETC.	COL. NO.	AMOUNT		
			$	¢			$	¢			$	¢	
	subtotals brought from preceeding page												
1													1
2													2
3													3
4													4
5													5
6													6
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15													15
16													16
17													17
18													18
19													19
20													20
21													21
22													22
23													23
	subtotals to next page or monthly total												

ASSIGNMENT SHEET #2

PART II

Post on the proper enterprise record monthly transactions for farm expenditures. Write your answers on the forms provided on the following pages.

(NOTE: Use the first column for the overhead enterprise. Refer to the *Oklahoma Young Farmer Record Book* for the appropriate column numbers.)

ASSIGNMENT SHEET #2

FORM 2.1 **PAGE** **MONTH** July **19____** **FARM EXPENDITURES**

LINE	DATE	TOTAL COST		DETAILED DESCRIPTION WHAT WAS BOUGHT, FROM WHOM	Check No.	HIRED LABOR		REPAIRS		INTEREST		FEED			SEEDS, PLANTS, OTHER		LINE
		$	¢			$	¢	$	¢	$	¢	Lbs.	$	¢	$	¢	
				subtotals brought from preceeding page													
1	2	325	00	John Crow - Labor (Dairy)		325	00										1
2	5	230	00	Atwood's - Supplies													2
3	8	65	00	Telephone (Farm Share)													3
4	8	230	00	Electricity (Farm Share)													4
5	10	220	00	Insurance (Farm Share)													5
6	10	500	00	Fuel (1/2 wheat)													6
7	17	300	00	John Crow - Labor (Dairy)		300	00										7
8	17	170	00	Vet Medicine (Dairy)													8
9	27	1,500	00	Custom Plowing (wheat)													9
10	27	7,925	00	Interest - Land Note						7925	00						10
11	27	7,100	00	Feed (Dairy)								36 Tons	7100	00			11
12	27	925	00	Repairs (1/2 wheat)				925	00								12
13	27	15,000	00	Principal - Land Note													13
14	31	1,250	00	Family Living													14
15																	15
16																	16
17																	17
18																	18
19																	19
20																	20
21																	21
22																	22
23																	23
				Subtotals to next page or to summary page													
						25		26		27			28		29		

ASSIGNMENT SHEET #2

FORM 2.6 **PAGE** **MONTH** July **19____** **DISTRIBUTION OF ENTERPRISE EXPENDITURES**

LINE	Overhead				Wheat				Dairy Cows				LINE
	ITEM DESCRIPTION QUANTITY, ETC.	COL. NO.	AMOUNT		ITEM DESCRIPTION QUANTITY, ETC.	COL. NO.	AMOUNT		ITEM DESCRIPTION QUANTITY, ETC.	COL. NO.	AMOUNT		
			$	¢			$	¢			$	¢	
	subtotals brought from preceding page												
1													1
2													2
3													3
4													4
5													5
6													6
7													7
8													8
9													9
10													10
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15													15
16													16
17													17
18													18
19													19
20													20
21													21
22													22
23													23
	subtotals to next page or monthly total												

ENTERPRISE ACCOUNTING AND SUPPLEMENTAL RECORDS
UNIT V

ASSIGNMENT SHEET #3 — COMPLETE AN ENTERPRISE CASH FLOW SUMMARY

NAME ______________________________ SCORE ______________

One of the more difficult tasks in compiling information for a detailed enterprise analysis is obtaining the total dollars allocated on the enterprise allocation forms. Most cooperators allocate their income and expenses to the proper enterprise each month. It becomes very important at the end of the year to summarize the monthly figures and to calculate year-end totals. These totals are useful in completing whole farm and detailed enterprise analyses. Also, by using an enterprise cash flow summary form, a cooperator may analyze the monthly cash flows throughout the year.

PART I

RECEIPTS

Using the information provided on the enterprise allocation forms for receipts, complete the enterprise cash flow summary on the following page.

(NOTE: When transferring numbers from the enterprise allocation form be sure to add all numbers from the same column number (COL. NO.) and to transfer the total to the enterprise cash flow summary.)

ASSIGNMENT SHEET #3

FORM 1.6A **PAGE** **MONTH** Nov. **19____** **ENTERPRISE RECEIPTS**

LINE	Dairy Cows							
	ITEM DESCRIPTION, QUANTITY, ETC.	COL. NO.	AMOUNT		ITEM DESCRIPTION QUANTITY, ETC.	COL. NO.	AMOUNT	
			$	¢			$	¢
	subtotals brought from preceeding page							
1	Cull cow	17	535	00				
2	4 - Bull calves	13	600	00				
3	11 - Heifer calves	13	2200	00				
4	Milk · 1013 cwt @ 14^{20}	9	14,385	00				
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
	Subtotals to next page or monthly total		17,720	00				

ASSIGNMENT SHEET #3

FORM 1.6A **PAGE** **MONTH** Dec. **19** **ENTERPRISE RECEIPTS**

LINE	Dairy Cows							
	ITEM DESCRIPTION, QUANTITY, ETC.	COL. NO.	AMOUNT		ITEM DESCRIPTION QUANTITY, ETC.	COL. NO.	AMOUNT	
			$	¢			$	¢
	subtotals brought from preceeding page							
1	Milk 1065 cwt @ 14.20	9	15123	00				
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
	Subtotals to next page or monthly total		15,123	00				

ASSIGNMENT SHEET #3

ENTERPRISE CASH FLOW SUMMARY

ENTERPRISE: Dairy Cows RECEIPTS	LINE	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	ALLOCATE FROM O.H.	YEAR-END TOTAL
Crop Sales															
	2														
	3														
	4														
Government Payments	5														
Custom Work	6														
Dividends, Refunds, Resales	7														
Cash Rent, Other	8														
Livestock Products (add columns 9-10)	10	15,200^{00}	15,000^{00}	15,500^{00}	15,500^{00}	15,400^{00}	15,100^{00}	15,000^{00}	15,000^{00}	14,500^{00}	15,000^{00}				
Misc. Income (add columns 11-12)	12														
Non-Breeding Livestock Raised (add columns 13-14)	14			2,400^{00}						3,880^{00}					
OPERATING SALES TOTAL (add lines 1-14)	A	15,200^{00}	15,000^{00}	17,900^{00}	15,500^{00}	15,400^{00}	15,100^{00}	15,000^{00}	15,000^{00}	18,380^{00}	15,000^{00}				
Livestock Purchased for Resale Sales Total (add cols. 15-16)	16														
Breeding Livestock Sales (add columns 17-18)	18		850^{00}	6,200^{00}						7,330^{00}					
Machinery, Equipment, Building Sales	19														
CAPITAL SALES TOTAL (add lines 18-19)	B	-0-	850^{00}	6,200^{00}	-0-	-0-	-0-	-0-	-0-	7,330^{00}	-0-				
TOTAL FARM RECEIPTS (add lines A plus 16 plus B)	C	15,200^{00}	15,850^{00}	24,100^{00}	15,500^{00}	15,400^{00}	15,100^{00}	15,000^{00}	15,000^{00}	25,710^{00}	15,000^{00}				

ASSIGNMENT SHEET #3

PART II

EXPENDITURES

Using the information provided on the enterprise allocation forms for expenditures, complete the enterprise cash flow summary on the following page.

(NOTE: When transferring numbers from the enterprise allocation form, be sure to add all numbers from the same column number [COL. NO.] and to transfer the total to the enterprise cash flow summary.)

ASSIGNMENT SHEET #3

FORM 2.6A **PAGE** **MONTH** Nov. **19**____ **ENTERPRISE EXPENDITURES**

LINE	Dairy Cows							
	ITEM DESCRIPTION QUANTITY, ETC.	COL. NO.	AMOUNT $	¢	ITEM DESCRIPTION QUANTITY, ETC.	COL. NO.	AMOUNT $	¢
	subtotals brought from preceeding page							
1	16% Dairy Ration	28	3800	00				
2	John Doe, D.V.M.	35	150	00				
3	Atwood's	32	125	00				
4	Utilities	40	295	00				
5	Hauling	31	600	00				
6	Hay	28	2,800	00				
7	Milk Replacer	28	10	00				
8	Calf Starter	28	50	00				
9	Salt & Mineral	28	120	00				
10	Breeding Fees	33	180	00				
11	Vet Supplies	35	20	00				
12	Western Auto	32	80	00				
13	Jo's Feed & Seed	32	15	00				
14	DHIA	34	90	00				
15	S. Perky	25	300	00				
16	Body Shop-Pickup	26	860	00				
17	VISA - Fuel	36	125	00				
18	Insurance	39	100	00				
19	Loafing shed materials	49	6,000	00				
20	Lumber	49	2,200	00				
21	Sheet iron	49	1,800	00				
22	Insurance	39	120	00				
23	S. Perky	25	375	00				
	subtotals to next page or month by subtotal		20,215	00				

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ASSIGNMENT SHEET #3

FORM 2.6A **PAGE** **MONTH** Dec. **19**__ **ENTERPRISE EXPENDITURES**

LINE	Dairy Cows							
	ITEM DESCRIPTION QUANTITY, ETC.	COL. NO.	AMOUNT $	¢	ITEM DESCRIPTION QUANTITY, ETC.	COL. NO.	AMOUNT $	¢
	subtotals brought from preceeding page							
1	Breeding Fees	33	90	00				
2	John Doe, D.V.M.	35	150	00				
3	Hauling	31	625	00				
4	16% Dairy Ration	28	4,100	00				
5	Hay	28	1,500	00				
6	DHIA	34	95	00				
7	Vet Medicine	35	10	00				
8	Hay	28	1,400	00				
9	Farm & Garden	32	175	00				
10	Breeding Fees	33	90	00				
11	Milk Replacer	28	25	00				
12	Salt & Mineral	28	120	00				
13	Utilities	40	295	00				
14	Calf Starter	28	50	00				
15	JS Dairy Supplies	32	45	00				
16	S. Perky	25	300	00				
17	Station - Fuel Bill	36	1,000	00				
18	County Treasurer	38	410	00				
19	Insurance	39	100	00				
20	Insurance	39	120	00				
21	New Pickup	48	7,300	00				
22	VISA - Fuel	36	150	00				
23	S. Perky	25	375	00				
	subtotals to next page or month by subtotal		19,025	00				

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ASSIGNMENT SHEET #3

ENTERPRISE CASH FLOW SUMMARY

ENTERPRISE: Dairy Cows EXPENDITURES	LINE	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	ALLOCATE FROM O.H.	YEAR-END TOTAL
Hired Labor	25	625^{00}	625^{00}	625^{00}	625^{00}	625^{00}	625^{00}	626^{00}	625^{00}	675^{00}	675^{00}				
Repairs	26	100^{00}	125^{00}	50^{00}	750^{00}	100^{00}	75^{00}	975^{00}	50^{00}	125^{00}	210^{00}				
Interest	27			1,500^{00}	600^{00}					6,000^{00}					
Feed	28	7,000^{00}	7,150^{00}	7,200^{00}	7,100^{00}	7,200^{00}	7,100^{00}	7,100^{00}	7,000^{00}	7,000^{00}	7,100^{00}				
Seed, Plants, Other	29														
Fertilizer, Lime, Chemicals	30														
Machine Hire	31	650^{00}	600^{00}	700^{00}	700^{00}	700^{00}	625^{00}	600^{00}	600^{00}	600^{00}	625^{00}				
Supplies	32	230^{00}	220^{00}	230^{00}	220^{00}	220^{00}	220^{00}	230^{00}	220^{00}	230^{00}	220^{00}				
Breeding Fees	33	180^{00}	180^{00}	180^{00}	180^{00}	180^{00}	180^{00}	180^{00}	180^{00}	180^{00}	180^{00}				
Miscellaneous Expenses	34	90^{00}	90^{00}	85^{00}	95^{00}	95^{00}	90^{00}	90^{00}	95^{00}	90^{00}	90^{00}				
Vet. Medicine	35	170^{00}	160^{00}	160^{00}	170^{00}	160^{00}	160^{00}	170^{00}	160^{00}	160^{00}	170^{00}				
Fuel and Oil	36	150^{00}	125^{00}	125^{00}	150^{00}	1,100^{00}	125^{00}	100^{00}	125^{00}	125^{00}	100^{00}				
Storage	37														
Taxes	38	278^{00}													
Insurance	39	200^{00}	200^{00}	200^{00}	200^{00}	200^{00}	200^{00}	220^{00}	220^{00}	220^{00}	220^{00}				
Utilities	40	290^{00}	290^{00}	290^{00}	290^{00}	290^{00}	290^{00}	295^{00}	295^{00}	295^{00}	295^{00}				
Cash Rent	41										3,000^{00}				
Freight, Trucking	42														
Conservation Expense	43														
OPERATING EXPEND. TOTAL (add lines 25-43)	E	9,963^{00}	9,765^{00}	17,345^{00}	11,060^{00}	10,870^{00}	9,690^{00}	10,585^{00}	9,570^{00}	15,700^{00}	12,885^{00}				
Livestock Purcd. for Resale Total (add cols. 44-45)	45	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-				
Breeding Stock Purchases	46				6,000^{00}	2,400^{00}				3,400^{00}					
	47														
Machinery and Equipment Purchases	48					2,050^{00}									
Land and Building Improvement	49														
CAPITAL EXPENSE TOTAL (add lines 46-49)	F	-0-	-0-	-0-	6,000^{00}	4,450^{00}	-0-	-0-	-0-	3,400^{00}	-0-				
TOTAL FARM EXPENSES (add lines E plus 45 plus F)	G	9,963^{00}	9,765^{00}	17,345^{00}	17,060^{00}	15,320^{00}	9,690^{00}	10,585^{00}	9,570^{00}	19,100^{00}	12,885^{00}				

ASSIGNMENT SHEET #3

PART III

Complete the following enterprise cash flow summary for an enterprise on your farm

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ASSIGNMENT SHEET #3

ENTERPRISE CASH FLOW SUMMARY

ENTERPRISE: RECEIPTS	LINE	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	ALLOCATE FROM O.H.	YEAR-END TOTAL
Crop Sales	1														
	2														
	3														
	4														
Government Payments	5														
Custom Work	6														
Dividends, Refunds, Resales	7														
Cash Rent, Other	8														
Livestock Products (add columns 9-10)	10														
Misc. Income (add columns 11-12)	12														
Non-Breeding Livestock Raised (add columns 13-14)	14														
OPERATING SALES TOTAL (add lines 1-14)	A														
Livestock Purchased for Resale Sales Total (add cols. 15-16)	16														
Breeding Livestock Sales (add columns 17-18)	18														
Machinery, Equipment, Building Sales	19														
CAPITAL SALES TOTAL (add lines 18-19)	B														
TOTAL FARM RECEIPTS (add lines A plus 16 plus B)	C														

ASSIGNMENT SHEET #3

ENTERPRISE CASH FLOW SUMMARY

ENTERPRISE: EXPENDITURES	LINE	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	ALLOCATE FROM O.H.	YEAR-END TOTAL
Hired Labor	25														
Repairs	26														
Interest	27														
Feed	28														
Seed, Plants, Other	29														
Fertilizer, Lime, Chemicals	30														
Machine Hire	31														
Supplies	32														
Breeding Fees	33														
Miscellaneous Expenses	34														
Vet. Medicine	35														
Fuel and Oil	36														
Storage	37														
Taxes	38														
Insurance	39														
Utilities	40														
Cash Rent	41														
Freight, Trucking	42														
Conservation Expense	43														
OPERATING EXPEND. TOTAL (add lines 25-43)	E														
Livestock Purcd. for Resale Total (add cols. 44-45)	45														
Breeding Stock Purchases	46														
	47														
Machinery and Equipment Purchases	48														
Land and Building Improvement	49														
CAPITAL EXPENSE TOTAL (add lines 46-49)	F														
TOTAL FARM EXPENSES (add lines E plus 45 plus F)	G														

ENTERPRISE ACCOUNTING AND SUPPLEMENTAL RECORDS
UNIT V

ASSIGNMENT SHEET #4 — COMPLETE A CROP AND FEED BALANCE RECORD FORM

NAME ______________________________ SCORE ______________

A crop and feed balance record form is used to calculate total quantities of feed fed and crops grown. It combines information from the receipts and expenditures accounts, livestock feeding records, and crop production records.

Use the information below to complete the crop and feed balance record form on the following page.

WHEAT CROP

- Beginning inventory included 5,000 bushels of wheat valued at $3.50 per bushel for a total value of $17,500.
- 1,000 acres of wheat were harvested during the year with an average yield of 32 bushels per acre; value of the wheat at harvest time was $3.60 per bushel for a total value of $115,200.
- 30,000 bushels of wheat were sold during the year for total wheat sales of $112,500.
- 1,000 bushels were used as seed wheat; value of the seed wheat was $4,000.
- Wastage was estimated at 150 bushels for a total value of $555.
- Closing inventory included 5,850 bushels of wheat valued at $3.70 per bushel for a total value of $21,645.
- No wheat was used for feed.

DAIRY RATION

- 40 tons of dairy ration valued at $6,400 were on hand at the beginning of the year.
- 500 tons of dairy ration were purchased during the year; total expenses were $80,000.
- Estimated that 1,000 pounds of dairy ration were wasted at a value of $80.
- 509.5 tons of dairy ration were fed to the dairy herd during the year; total value of feed fed was $81,520.
- 30 tons of dairy ration valued at $4,800 were on hand at the end of year.

ASSIGNMENT SHEET #4

FORM S-6

CROP AND FEED BALANCE

This table assumes the accounting of the operator's share only. Hence the feed purchased, raised, sold, etc. refers to that belonging to the operator. Under livestock share arrangements it may be desirable to alter these measures to include the landlord's share.			CROP OR FEED							
UNIT OF MEASURE			QTY.	AMOUNT	QTY.	AMOUNT	QTY.	AMOUNT	QTY.	AMOUNT
1	SOURCE OF FEED	Opening Inventory		$		$		$		$
2		Purchased								
3										
4		Crops Raised								
5		Total In								
6	FEED ACCOUNTED FOR	Closing Inventory								
7		Sales								
8										
9		Seeded								
10		Wastage, Spoilage								
11		Total Out								
12	TOTAL FEED FED* L5-L11			$		$		$		$
13	FEED CONSUMED BY LIVESTOCK FROM FEED RECORDS	Beef								
14										
15										
16		Swine								
17										
18										
19		Dairy								
20										
21		Non-Prod. Lvstk.								
22										
23	TOTAL FEED RECORDED**			$		$		$		$
24	ERROR (DIFFERENCE) L12-23			$		$		$		$
25	TOTAL FEED FED AS DETERMINED FROM ALL SOURCES***			$		$		$		$

TOTAL WEIGHT OF ALL FEEDS FED	LBS.
TOTAL VALUE OF ALL FEEDS FED	$

*As tabulated by difference from inventories, production, purchases and sales.

**As recorded from feed records.

***Final feed allocation as determined from all sources.

****Convert all feeds to pounds and roughages to a 90% dry weight (hay equivalent) basis.

ENTERPRISE ACCOUNTING AND SUPPLEMENTAL RECORDS
UNIT V

ASSIGNMENT SHEET #5 — COMPLETE A LIVESTOCK PRODUCTION SUMMARY

NAME ______________________________ SCORE ______________

Livestock production summary records of growth can be kept on individual animals, lots or pens, group purchases, or whole herds. These records may cover periods of specific intervals or an inventory period of one year. Both physical and financial information are necessary to complete the records.

Use the information below to complete the livestock production summary record form on the following page.

STOCKERS

- Opening inventory included 300 stocker cattle, weighing an average of 450 pounds per head for a total weight of 135,000 pounds. Value of the cattle was $101,250.
- Closing inventory included 344 stocker cattle, weighing an average of 450 pounds for a total weight of 154,800 pounds. Value of the cattle was $123,840.
- Three hundred and fifty stockers weighing a total of 140,000 pounds were purchased for resale during the year. Purchase cost was $112,000.
- Sales during the year totaled $146,615 for 295 head, weighing 209,450 pounds.
- Nine stockers weighing a total of 4,050 pounds died during the year.
- Two head weighing 1,400 pounds and valued at $980 were consumed in the home.
- There were no births in the stocker enterprise.

BEEF COWS

- Opening inventory included 85 head, weighing 61,000 pounds, and valued at $32,000.
- Forty-one calves were born during the year.
- Five replacement heifers weighing 4,000 pounds were purchased for $4,000 during the year.
- Fifty-four head weighing 37,500 pounds were sold for $22,800 during the year.
- Seven head weighing 1,950 pounds died during the year.
- Closing inventory included 70 head, weighing 42,000 pounds, and valued at $22,750.

ASSIGNMENT SHEET #5

FORM S-7

LIVESTOCK PRODUCTION SUMMARY

This table summarizes the number, weight and value increases or productions for the year. The number in L11 should be zero since the TOTAL number IN (L4) should balance OUT (L9). Hence, L11 will indicate accounting errors in the number of livestock.

	DESCRIPTION	TYPE:				TYPE:				TYPE:			
		NO.	WEIGHT	AMOUNT		NO.	WEIGHT	AMOUNT		NO.	WEIGHT	AMOUNT	
1	Opening Inventory			$				$				$	
2	Purchases												
3	Births												
4	TOTAL IN			$				$				$	
5	Closing Inventory												
6	Sales												
7	Home Consumed Products												
8	Deaths												
9	TOTAL OUT			$				$				$	
10	INVENTORY CHANGE (L5-1)			$				$				$	
11	NET INCREASE (L9-4)			$				$				$	

TOTAL LIVESTOCK INCREASE $

This table summarizes the number, weight and value increases or productions for the year. The number in L11 should be zero since the TOTAL number IN (L4) should balance OUT (L9). Hence, L11 will indicate accounting errors in the number of livestock.

	DESCRIPTION	TYPE:				TYPE:				TYPE:			
		NO.	WEIGHT	AMOUNT		NO.	WEIGHT	AMOUNT		NO.	WEIGHT	AMOUNT	
1	Opening Inventory			$				$				$	
2	Purchases												
3	Births												
4	TOTAL IN			$				$				$	
5	Closing Inventory												
6	Sales												
7	Home Consumed Products												
8	Deaths												
9	TOTAL OUT			$				$				$	
10	INVENTORY CHANGE (L5-1)			$				$				$	
11	NET INCREASE (L9-4)			$				$				$	

TOTAL LIVESTOCK INCREASE $

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ENTERPRISE ACCOUNTING AND SUPPLEMENTAL RECORDS
UNIT V

ASSIGNMENT SHEET #6 — COMPLETE A CROP PRODUCTION SUMMARY

NAME ______________________________ SCORE ______________

A crop production summary facilitates computation of total value of crops produced, value of feed crops raised, and other data that will be helpful later in analyzing the year's operation. The summary is needed whether or not individual field records are kept. It is possible to see at a glance from this record what use was made of the acreage of the entire farm.

Use the information below to complete the crop production summary record form on the following pages.

Farmer Jones farms and ranches 660 acres of owned land and 420 acres of rented land. Major crop enterprises in the farming operation are cotton, wheat, and alfalfa hay. Jones also has beef cattle and winter stocker cattle. Average prices received for the crop enterprises during the previous year included cotton, $0.52 per pound; wheat, $3.50 per bushel; and alfalfa hay, $80 per ton.

Production from the Jones-owned land included 80 acres of cotton with an average yield of 400 pounds per acre; 120 acres of wheat with an average yield of 32 bushels per acre; and 20 acres of alfalfa hay with an average yield of 4.5 tons per acre. Jones also diverted 120 acres to summer fallow. Jones owns 250 acres of native unimproved pasture for which a forage production value of $10 per acre has been assigned. Also included in the owned land are 10 acres for the farmstead; 40 acres of wasteland, gullies, fencelines; and 20 acres of blackjack trees with no value assigned.

Production from land Jones is renting included 60 acres of cotton with an average yield of 500 pounds per acre, and 360 acres of wheat with an average yield of 30 bushels per acre. Landlord's share was 33 percent of the cotton production and 25 percent of the wheat production.

ASSIGNMENT SHEET #6

FORM S-9

CROP PRODUCTION SUMMARY

	CROP	UNIT	PRICE	OWNED LAND					RENTED LAND	
				FIELD	*ACRES	YIELD	PRODUCTION	AMOUNT	FIELD	ACRES
1	Cash Crops							$		
2										
3										
4										
8	Small Grains									
9										
10										
11										
15	Hay*									
16										
17										
18										
22	Diverted Acres									
23										
24										
25	Total Crop Acres									
26	Rotated Pasture									
27										
28										
29	Total rotated acres (add 1 thru 28)									
30										
31	Improved permanent pasture									
32	Native unimproved pasture									
33										
34	Woodland									
35	Waste, etc.									
36	Farmstead									
37	Total Farm (add 29 thru 36)							$		

*Report hay acres from multiple cuttings and double crop acres only once.

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ASSIGNMENT SHEET #6

FORM S-10

CROP PRODUCTION SUMMARY (Continued)

	RENTED LAND (Continued)											WHOLE FARM				
	YIELD	PRODUCTION	AMOUNT		LANDLORD SHARE				OPERATOR SHARE			*ACRES	YIELD	PRODUCTION	AMOUNT	
					%	QTY.	AMOUNT		QTY.	AMOUNT						
1			$				$			$					$	
2																
3																
4																
8																
9																
10																
11																
15																
16																
17																
18																
22																
23																
24																
25																
26																
27																
28																
29																
30																
31																
32																
33																
34																
35																
36																
37																

ENTERPRISE ACCOUNTING AND SUPPLEMENTAL RECORDS
UNIT V

ASSIGNMENT SHEET #7 — COMPLETE A MONTHLY LABOR SUMMARY

NAME ______________________________ SCORE ______________

It is useful to keep a record of the labor used in one or more enterprises when there is some special reason to study efficiency or seasonal requirements; when labor allocation is important in the selection of enterprises; or when it must be determined whether a particular enterprise with a high labor requirement is profitable. Labor becomes a particularly critical item at certain times of the year. As enterprises compete for labor use, its value, measured in terms of net farm income, may be many times greater than market price. In this respect, farm labor records may be useful at intervals in the history of the farm even though they may not be kept on a continuing basis by most cooperators.

Using the information below, complete the monthly labor summary records form on the following page.

Farmer Smith and family have kept monthly labor records for the past year. Each month Farmer Smith worked 20 hours and other family members worked 40 hours doing farm chores. The Smiths' major enterprises consisted of a 100-head beef cow herd, 480 acres of wheat, and 240 acres of cotton. On the form provided, Farmer Smith compiled the number of operator, family, and hired labor hours worked each month, and allocated those hours to each major enterprise.

ASSIGNMENT SHEET #7

FORM S-12

MONTHLY LABOR SUMMARY

These tables provide for a monthly labor summary for different enterprises. Monthly totals can be calculated from daily labor records (which are not a part of this book) or estimated.

MONTH	ENTERPRISE											
	Beef Cows				Wheat				Cotton			
	OPER.	FAMILY	HIRED	TOTAL	OPER.	FAMILY	HIRED	TOTAL	OPER.	FAMILY	HIRED	TOTAL
JANUARY	124				39				43			
FEBRUARY	175				50	45	55					
MARCH	184											
APRIL	75											
MAY	79								141	30		
JUNE	72				188	150	723			70		
JULY	72				100	150				70		
AUGUST	58				160	200						
SEPTEMBER	70				150	57						
OCTOBER	75											
NOVEMBER	102								147	50	60	
DECEMBER	118								51			
TOTAL												

The enterprise totals plus farm overhead should correspond to the total labor supplied on the farm.
Overhead jobs include such things as machinery and building repair, farmstead cleanup, purchasing of supplies, banding, etc.

MONTH	TOTAL ENTERPRISE, FARM OVERHEAD, AND TOTAL FARM LABOR											
	TOTAL ENTERPRISE				FARM OVERHEAD				TOTAL FARM (enterprise plus overhead)			
	OPER.	FAMILY	HIRED	TOTAL	OPER.	FAMILY	HIRED	TOTAL	OPER.	FAMILY	HIRED	TOTAL
JANUARY												
FEBRUARY												
MARCH												
APRIL												
MAY												
JUNE												
JULY												
AUGUST												
SEPTEMBER												
OCTOBER												
NOVEMBER												
DECEMBER												
TOTAL												

ENTERPRISE ACCOUNTING AND SUPPLEMENTAL RECORDS
UNIT V

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1 — Evaluated to the satisfaction of the instructor

Assignment Sheet #2

PART I — See following pages

PART II — See following pages

Assignment Sheet #3

PART I — See following pages

PART II — See following pages

PART III — Evaluated to the satisfaction of the instructor

Assignment Sheet #4 — See following pages

Assignment Sheet #5 — See following pages

Assignment Sheet #6 — See following pages

Assignment Sheet #7 — See following pages

ANSWERS TO ASSIGNMENT SHEET #2 — PART I

FORM 1.6 **PAGE** **MONTH** July **19** **DISTRIBUTION OF ENTERPRISE RECEIPTS**

LINE	Overhead				Wheat				Dairy Cows				LINE
	ITEM DESCRIPTION, QUANTITY, ETC.	COL NO	AMOUNT $	¢	ITEM DESCRIPTION, QUANTITY, ETC.	COL NO.	AMOUNT $	¢	ITEM DESCRIPTION, QUANTITY, ETC.	COL NO	AMOUNT $	¢	
	subtotals brought from preceeding page												
1					Wheat 10,000 bu. @ 3.50	1	35,000	00					1
2					Straw Hay 1,000 bales @ $1.^{00}$	1	1,000	00					2
3									1 hd. cull cow	17	535	00	3
4									milk sales 1013 cwt. @ 14^{20}	9	14,385	00	4
5	Custom Work 500 Ac. @ 15^{00}	6	7,500	00									5
6	10 Mkt. Hogs @ 100^{00} ea.	13	1,000	00									6
7													7
8													8
9													9
10													10
11													11
12													12
13													13
14													14
15													15
16													16
17													17
18													18
19													19
20													20
21													21
22													22
23													23
	subtotals to next page or monthly total												

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ANSWERS TO ASSIGNMENT SHEET #2 — PART II

FORM 2.6 **PAGE** **MONTH** July 19 **DISTRIBUTION OF ENTERPRISE EXPENDITURES**

LINE	Overhead				Wheat				Dairy Cows				LINE
	ITEM DESCRIPTION QUANTITY, ETC	COL NO	AMOUNT		ITEM DESCRIPTION QUANTITY, ETC	COL NO	AMOUNT		ITEM DESCRIPTION QUANTITY, ETC	COL NO	AMOUNT		
			$	¢			$	¢			$	¢	
	subtotals brought from preceding page												
1									Hired Labor	25	325	00	1
2	Supplies	32	230	00									2
3	Telephone	40	65	00									3
4	Electricity	40	230	00									4
5	Insurance	39	220	00									5
6	Fuel	36	250	00	Fuel	36	250	00					6
7									Hired Labor	25	300	00	7
8									Vet Medicine	35	170	00	8
9					Custom Plowing	31	1,500	00					9
10	Interest - Land Note	27	7,925	00									10
11									Feed - 36 tons	28	7,100	00	11
12	Repairs	26	462	50	Repairs	26	462	50					
13													13
14													14
15													15
16													16
17													17
18													18
19													19
20													20
21													21
22													22
23													23
	subtotals to next page or monthly total												

ANSWERS TO ASSIGNMENT SHEET #3 — PART I

ENTERPRISE CASH FLOW SUMMARY

ENTERPRISE: Dairy Cows RECEIPTS	LINE	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	ALLOCATE FROM O.H.	YEAR-END TOTAL
Crop Sales	1														
	2														
	3														
	4														
Government Payments	5														
Custom Work	6														
Dividends, Refunds, Resales	7														
Cash Rent, Other	8														
Livestock Products (add columns 9-10)	10	15,200^{00}	15,000^{00}	15,500^{00}	15,500^{00}	15,400^{00}	15,100^{00}	15,000^{00}	15,000^{00}	14,500^{00}	15,000^{00}	14,385^{00}	15,123^{00}		180,708^{00}
Misc. Income (add columns 11-12)	12														
Non-Breeding Livestock Raised (add columns 13-14)	14			2,400^{00}						3,880^{00}		2,800^{00}			9,080^{00}
OPERATING SALES TOTAL (add lines 1-14)	A	15,200^{00}	15,000^{00}	17,900^{00}	15,500^{00}	15,400^{00}	15,100^{00}	15,000^{00}	15,000^{00}	18,380^{00}	15,000^{00}	17,185^{00}	15,123^{00}		189,788^{00}
Livestock Purchased for Resale Sales Total (add cols. 15-16)	16														
Breeding Livestock Sales (add columns 17-18)	18		850^{00}	6,200^{00}						7,330^{00}		535^{00}			14,915^{00}
Machinery, Equipment, Building Sales	19														
CAPITAL SALES TOTAL (add lines 18-19)	B	-0-	850^{00}	6,200^{00}	-0-	-0-	-0-	-0-	-0-	7,330^{00}	-0-	535^{00}	-0-		14,915^{00}
TOTAL FARM RECEIPTS (add lines A plus 16 plus B)	C	15,200^{00}	15,850^{00}	24,100^{00}	15,500^{00}	15,400^{00}	15,100^{00}	15,000^{00}	15,000^{00}	25,710^{00}	15,000^{00}	17,720^{00}	15,123^{00}		204,703^{00}

ANSWERS TO ASSIGNMENT SHEET #3 — PART II

ENTERPRISE CASH FLOW SUMMARY

ENTERPRISE: Dairy Cows EXPENDITURES	LINE	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEP.	OCT.	NOV.	DEC.	ALLOCATE FROM O.H.	YEAR-END TOTAL
Hired Labor	25	625^{00}	625^{00}	625^{00}	625^{00}	625^{00}	625^{00}	625^{00}	625^{00}	675^{00}	675^{00}	675^{00}	675^{00}		$7,700^{00}$
Repairs	26	100^{00}	125^{00}	50^{00}	730^{00}	100^{00}	75^{00}	975^{00}	50^{00}	125^{00}	210^{00}	860^{00}			$3,400^{00}$
Interest	27			$7,500^{00}$	600^{00}					$6,000^{00}$					$14,100^{00}$
Feed	28	$7,000^{00}$	$7,150^{00}$	$7,200^{00}$	$7,100^{00}$	$7,200^{00}$	$7,100^{00}$	$7,100^{00}$	$7,000^{00}$	$7,000^{00}$	$7,100^{00}$	$6,780^{00}$	$7,195^{00}$		$84,925^{00}$
Seed, Plants, Other	29														
Fertilizer, Lime, Chemicals	30														
Machine Hire	31	650^{00}	600^{00}	700^{00}	700^{00}	700^{00}	625^{00}	600^{00}	600^{00}	600^{00}	625^{00}	600^{00}	625^{00}		$7,625^{00}$
Supplies	32	230^{00}	220^{00}	230^{00}	220^{00}	220^{00}	220^{00}	230^{00}	220^{00}	230^{00}	220^{00}	220^{00}	220^{00}		$2,680^{00}$
Breeding Fees	33	180^{00}	180^{00}	180^{00}	180^{00}	180^{00}	180^{00}	180^{00}	180^{00}	180^{00}	180^{00}	180^{00}	180^{00}		$2,160^{00}$
Miscellaneous Expenses	34	90^{00}	90^{00}	85^{00}	95^{00}	95^{00}	90^{00}	90^{00}	95^{00}	90^{00}	90^{00}	90^{00}	95^{00}		$1,095^{00}$
Vet. Medicine	35	170^{00}	160^{00}	160^{00}	170^{00}	160^{00}	160^{00}	170^{00}	160^{00}	160^{00}	170^{00}	170^{00}	160^{00}		$1,970^{00}$
Fuel and Oil	36	150^{00}	125^{00}	125^{00}	150^{00}	$1,100^{00}$	125^{00}	100^{00}	125^{00}	125^{00}	100^{00}	125^{00}	$1,150^{00}$		$3,500^{00}$
Storage	37														
Taxes	38	278^{00}											410^{00}		688^{00}
Insurance	39	200^{00}	200^{00}	200^{00}	200^{00}	200^{00}	200^{00}	220^{00}	220^{00}	220^{00}	220^{00}	220^{00}	220^{00}		$2,520^{00}$
Utilities	40	290^{00}	290^{00}	290^{00}	290^{00}	290^{00}	290^{00}	295^{00}	295^{00}	295^{00}	295^{00}	295^{00}	295^{00}		$3,510^{00}$
Cash Rent	41										$3,000^{00}$				$3,000^{00}$
Freight, Trucking	42														
Conservation Expense	43														
OPERATING EXPEND. TOTAL (add lines 25-43)	E	$9,963^{00}$	$9,765^{00}$	$17,345^{00}$	$11,060^{00}$	$10,870^{00}$	$9,690^{00}$	$10,585^{00}$	$9,570^{00}$	$15,700^{00}$	$12,885^{00}$	$10,215^{00}$	$11,225^{00}$		$138,873^{00}$
Livestock Purcd. for Resale Total (add cols. 44-45)	45	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-				
Breeding Stock Purchases	46				$6,000^{00}$	$2,400^{00}$				$3,400^{00}$					$11,800^{00}$
	47														
Machinery and Equipment Purchases	48					$2,050^{00}$							$7,800^{00}$		$9,850^{00}$
Land and Building Improvement	49											$10,000^{00}$			$10,000^{00}$
CAPITAL EXPENSE TOTAL (add lines 46-49)	F	-0-	-0-	-0-	$6,000^{00}$	$4,450^{00}$	-0-	-0-	-0-	$3,400^{00}$	-0-	$10,000^{00}$	$7,800^{00}$		$31,650^{00}$
TOTAL FARM EXPENSES (add lines E plus 45 plus F)	G	$9,963^{00}$	$9,765^{00}$	$17,345^{00}$	$17,060^{00}$	$15,320^{00}$	$9,690^{00}$	$10,585^{00}$	$9,570^{00}$	$19,100^{00}$	$12,885^{00}$	$20,215^{00}$	$19,025^{00}$		$170,523^{00}$

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ANSWERS TO ASSIGNMENT SHEET #4

FORM S-6

CROP AND FEED BALANCE

This table assumes the accounting of the operator's share only. Hence the feed purchased, raised, sold, etc. refers to that belonging to the operator. Under livestock share arrangements it may be desirable to alter these measures to include the landlord's share

			CROP OR FEED											
			Wheat			Dairy Ration								
UNIT OF MEASURE			QTY. (bu.)	AMOUNT		QTY. (Ton)	AMOUNT		QTY.	AMOUNT		QTY.	AMOUNT	
1	SOURCE OF FEED	Opening Inventory	5,000	$ 17,500	00	40	$ 6,400	00		$			$	
2		Purchased				500	80,000	00						
3														
4		Crops Raised	32,000	115,200	00									
5		Total In	37,000	132,700	00	540	86,400	00						
6	FEED ACCOUNTED FOR	Closing Inventory	5,850	21,645	00	30	4,800	00						
7		Sales	30,000	112,500	00									
8														
9		Seeded	1,000	4,000	00									
10		Wastage, Spoilage	150	555	00	.5	80	00						
11		Total Out	37,000	138,700	00	30.5	4,880	00						
12	TOTAL FEED FED* L5-L11		-0-	$ <6,000	00>	509.5	$ 81,520	00		$			$	
13	FEED CONSUMED BY LIVESTOCK FROM FEED RECORDS	Beef												
14														
15														
16		Swine												
17														
18														
19		Dairy				509.5	81,520	00						
20														
21		Non-Prod. Lvstk.												
22														
23	TOTAL FEED RECORDED**		-0-	$		509.5	$ 81,520	00		$			$	
24	ERROR (DIFFERENCE) L12-23		-0-	$		-0-	$			$			$	
25	TOTAL FEED FED AS DETERMINED FROM ALL SOURCES***			$			$			$			$	

TOTAL WEIGHT OF ALL FEEDS FED	LBS.
TOTAL VALUE OF ALL FEEDS FED	$

*As tabulated by difference from inventories, production, purchases and sales.

**As recorded from feed records.

***Final feed allocation as determined from all sources.

****Convert all feeds to pounds and roughages to a 90% dry weight (hay equivalent) basis.

ANSWERS TO ASSIGNMENT SHEET #5

FORM S-7

LIVESTOCK PRODUCTION SUMMARY

This table summarizes the number, weight and value increases or productions for the year. The number in L11 should be zero since the TOTAL number IN (L4) should balance OUT (L9). Hence, L11 will indicate accounting errors in the number of livestock.

	DESCRIPTION	TYPE: Stockers				TYPE: Beef Cows				TYPE:			
		NO.	WEIGHT	AMOUNT		NO.	WEIGHT	AMOUNT		NO.	WEIGHT	AMOUNT	
1	Opening Inventory	300	135,000	$101,250	00	85	61,000	$ 32,000	00			$	
2	Purchases	350	140,000	112,000	00	5	4,000	4,000	00				
3	Births		—	—		41	—	—			—	—	
4	TOTAL IN	650	275,000	$213,250	00	131	65,000	$ 36,000	00			$	
5	Closing Inventory	344	154,800	123,840	00	70	42,000	22,750	00				
6	Sales	295	209,450	146,615	00	54	37,500	22,800	00				
7	Home Consumed Products	2	1,400	980	00	-0-	-0-	-0-					
8	Deaths	9	4,050	—		7	1,950	—				—	
9	TOTAL OUT	650	369,700	$271,435	00	131	81,450	$ 45,550	00			$	
10	INVENTORY CHANGE (L5-1)	44	19,800	$ 22,590	00	< 15 >	<19,000>	$ <9,250	00 >			$	
11	NET INCREASE (L9-4)	-0-	94,700	$ 58,185	00	-0-	16,450	$ 9,550	00			$	

TOTAL LIVESTOCK INCREASE $

This table summarizes the number, weight and value increases or productions for the year. The number in L11 should be zero since the TOTAL number IN (L4) should balance OUT (L9). Hence, L11 will indicate accounting errors in the number of livestock.

	DESCRIPTION	TYPE:				TYPE:				TYPE:			
		NO.	WEIGHT	AMOUNT		NO.	WEIGHT	AMOUNT		NO.	WEIGHT	AMOUNT	
1	Opening Inventory			$				$				$	
2	Purchases												
3	Births		—	—			—	—			—	—	
4	TOTAL IN			$				$				$	
5	Closing Inventory												
6	Sales												
7	Home Consumed Products												
8	Deaths			—				—				—	
9	TOTAL OUT			$				$				$	
10	INVENTORY CHANGE (L5-1)			$				$				$	
11	NET INCREASE (L9-4)			$				$				$	

TOTAL LIVESTOCK INCREASE $

ANSWERS TO ASSIGNMENT SHEET #6

FORM S-9

CROP PRODUCTION SUMMARY

	CROP	UNIT	PRICE	OWNED LAND						RENTED LAND	
				FIELD	*ACRES	YIELD	PRODUCTION	AMOUNT		FIELD	ACRES
1	Cash Crops Cotton	LB.	.52		80	400#	32,000#	$16,640	00		60
2											
3											
4											
8	Small Grains Wheat	Bu.	3.50		120	32 bu.	3,840	13,440	00		360
9											
10											
11											
15	Hay* Alfalfa	Ton	80.00		20	4.5 tons	90 tons	7,200	00		
16											
17											
18											
22	Diverted Acres				120			0	00		
23											
24											
25	Total Crop Acres				340						420
26	Rotated Pasture										
27											
28											
29	Total rotated acres (add 1 thru 28)				340						420
30											
31	Improved permanent pasture										
32	Native unimproved pasture				250			2,500	00		
33											
34	Woodland				20			0	00		
35	Waste, etc.				40						
36	Farmstead				10						
37	Total Farm (add 29 thru 36)				660			$39,780	00		420

*Report hay acres from multiple cuttings and double crop acres only once.

ANSWERS TO ASSIGNMENT SHEET #6

FORM S-10

CROP PRODUCTION SUMMARY (Continued)

	RENTED LAND (Continued)								WHOLE FARM			
	YIELD	PRODUCTION	AMOUNT	LANDLORD SHARE			OPERATOR SHARE		*ACRES	YIELD	PRODUCTION	AMOUNT
				%	QTY.	AMOUNT	QTY.	AMOUNT				
1	500#	30,000#	$15,600 00	33%	10,000	$ 5,200 00	20,000	$ 10,400 00	140	444#	62,000#	$ 32,240 00
2												
3												
4												
8	30	10,800 bu.	37,800 00	25%	2,700	9,450 00	8,100	28,350 00	480	30.5 bu.	14,640 bu.	51,240 00
9												
10												
11												
15									20	4.5 tons	90 tons	7,200 00
16												
17												
18												
22									120			0 00
23												
24												
25									760			
26												
27												
28												
29			53,400 00			14,650 00		38,750 00	760			90,680 00
30												
31												
32									250			2,500 00
33												
34									20			
35									40			
36									10			
37			53,400 00			14,650 00		38,750 00	1,080			93,180 00

ANSWERS TO ASSIGNMENT SHEET #7

FORM S-12

MONTHLY LABOR SUMMARY

These tables provide for a monthly labor summary for different enterprises. Monthly totals can be calculated from daily labor records (which are not a part of this book) or estimated.

MONTH	ENTERPRISE											
	Beef Cows				Wheat				Cotton			
	OPER.	FAMILY	HIRED	TOTAL	OPER.	FAMILY	HIRED	TOTAL	OPER.	FAMILY	HIRED	TOTAL
JANUARY	124			124	39			39	43			43
FEBRUARY	175			175	50	40	55	145				
MARCH	184			184								
APRIL	75			75								
MAY	79			79					141	30		171
JUNE	72			72	188	150	723	1,061		70		70
JULY	72			72	100	150		250		70		70
AUGUST	58			58	160	200		360				
SEPTEMBER	70			70	150	57		207				
OCTOBER	75			75								
NOVEMBER	102			102					147	50	60	257
DECEMBER	118			118					51			51
TOTAL	1,204			1,204	687	597	778	2,062	382	220	60	662

The enterprise totals plus farm overhead should correspond to the total labor supplied on the farm.
Overhead jobs include such things as machinery and building repair, farmstead cleanup, purchasing of supplies, banding, etc.

MONTH	TOTAL ENTERPRISE, FARM OVERHEAD, AND TOTAL FARM LABOR											
	TOTAL ENTERPRISE				FARM OVERHEAD				TOTAL FARM (enterprise plus overhead)			
	OPER.	FAMILY	HIRED	TOTAL	OPER.	FAMILY	HIRED	TOTAL	OPER.	FAMILY	HIRED	TOTAL
JANUARY	206			206	20	40		60	226	40		266
FEBRUARY	225	40	55	320	20	40		60	245	80	55	380
MARCH	184			184	20	40		60	204	40		244
APRIL	75			75	20	40		60	95	40		135
MAY	220	30		250	20	40		60	240	70		310
JUNE	260	220	723	1,203	20	40		60	280	260	723	1,263
JULY	172	220		392	20	40		60	192	260		452
AUGUST	218	200		418	20	40		60	238	240		478
SEPTEMBER	220	57		277	20	40		60	240	97		337
OCTOBER	75			75	20	40		60	95	40		135
NOVEMBER	249	50	60	359	20	40		60	269	[illegible]	60	419
DECEMBER	169			169	20	40		60	189	40		229
TOTAL	2,273	817	838	3,928	240	480		720	2,513	1,297	838	4,648

ENTERPRISE ACCOUNTING AND SUPPLEMENTAL RECORDS
UNIT V

TEST

NAME ______________________________ SCORE ______________

1. Match to their correct definitions terms associated with enterprise accounting and supplemental records. Write the correct numbers in the blanks.

_____a. Detailed recording of all income and expense items directly related to a specific enterprise

_____b. Additional information to financial records that aids in providing a complete records system

_____c. Information that normally details yield, production, or physical performance measures of an enterprise

_____d. Unit of economic organization in the farm business

1. Production records
2. Enterprise accounting
3. Supplemental records
4. Enterprise

2. State purposes of enterprise accounting.

a. ____

____

b. ____

____

c. ____

____

3. Match to their correct descriptions ways to classify enterprises for an enterprise record and analysis. Write the correct numbers in the blanks.

_____a. Enterprise that contributes large portion of income to the farm business

_____b. Enterprise that contributes small portion of income to farm business

1. Minor enterprise
2. Major enterprise

TEST

_____c.	Income and expenses that cannot be directly attributed to an enterprise at the time incurred	3. Overhead enterprise 4. Detailed enterprise
_____d.	Subdivision of a major enterprise	

4. State five guidelines for allocating farm receipts and expenditures to various enterprises

a. ____

____

b. ____

____

c. ____

____

d. ____

____

e. ____

____

5. Select from the following list guidelines for allocating entries to overhead enterprise. Write an "X" in the blank before each correct answer.

_____a. Allocate nonfarm income and expenses according to use in an enterprise

_____b. Allocate among enterprises in proportion to the income contributed by each enterprise to the total farm business

_____c. Allocate building expenses according to the total space occupied by an enterprise

_____d. Allocate inflow and outflow from loans attributable to an enterprise

_____e. Allocate crop expenses according to proportion of acres to total acres

TEST

6. State three purposes for keeping supplemental records.

   a. ______________________________

   b. ______________________________

   c. ______________________________

7. Match types of supplemental records to their appropriate uses. Write the correct numbers in the blanks.

   ______a. Used for income tax reporting purposes and for balancing other supplemental records

   ______b. Used for birth and weaning records and for planning livestock operations

   ______c. Used for keeping track of livestock deaths and causes of deaths

   ______d. Used for recording feed consumption for livestock enterprises

   ______e. Used to calculate total quantities of feed fed

   ______f. Used to summarize numbers, weights, and values of livestock for a year

   ______g. Used for keeping crop information by field or farm

   ______h. Used to pull together yields for each crop, values, and total acres involved so that total production can be calculated

   ______i. Used to summarize operator, family, and hired labor hours used by each enterprise

   1. Crop records
   2. Mortality
   3. Livestock production summary
   4. Labor
   5. Home-used products
   6. Crop and feed balance
   7. Breeding
   8. Livestock feeding
   9. Crop production summary

(NOTE: Test questions 8-14 list the assignment sheets. They are an important part of this test. If they have not been completed, check with your instructor.)

8. Determine what farm business enterprises will be used for enterprise records and analysis.

9. Post on the proper enterprise record monthly transactions for farm receipts and expenditures.

TEST

10. Complete an enterprise cash flow summary.
11. Complete a crop and feed balance record form.
12. Complete a livestock production summary.
13. Complete a crop production summary.
14. Complete a monthly labor summary.

ENTERPRISE ACCOUNTING AND SUPPLEMENTAL RECORDS
UNIT V

ANSWERS TO TEST

1. a. 2
   b. 3
   c. 1
   d. 4

2. a. Pinpointing level of profitability and factors affecting profitability during accounting period
   b. Aiding cooperator in decision making by using historical records to reveal levels of performance from year to year
   c. Determining management's performance through comparisons over a specific time period

3. a. 2
   b. 1
   c. 3
   d. 4

4. Answer should include any five of the following
   a. Allocate farm receipts or expenditures to various enterprises when entering data in financial records
   b. Enter as overhead enterprise farm receipts or expenditures that cannot be directly attributed to an enterprise
   c. Be sure to allocate physical data to appropriate enterprise
   d. Allocate capital asset sales or purchases attributable to an enterprise
   e. Do not allocate inflow or outflow from loans
   f. Do not allocate nonfarm receipts or expenses
   g. Allocate noncash expenses at end of accounting period
   h. Allocate internal transfers as they occur

ANSWERS TO TEST

5. b, c, e

6. Answer should include any three of the following
   a. Supplementing financial records
   b. Recording yields, production, and physical performance of an enterprise
   c. Recording different production practices and weather conditions
   d. Recording materials and resources used by the various enterprises

7. a. 5
   b. 7
   c. 2
   d. 8
   e. 6
   f. 3
   g. 1
   h. 9
   i. 4

8. Evaluated to the satisfaction of the instructor

9. Evaluated to the satisfaction of the instructor

10. Evaluated to the satisfaction of the instructor

11. Evaluated to the satisfaction of the instructor

12. Evaluated to the satisfaction of the instructor

13. Evaluated to the satisfaction of the instructor

14. Evaluated to the satisfaction of the instructor

ENTERPRISE BUDGETS
UNIT VI

UNIT OBJECTIVE

After completing this unit, the cooperator should be able to modify and analyze returns of enterprise budgets. The cooperator will show this knowledge by completing assignment sheets and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the cooperator should be able to

1. Match terms associated with enterprise budgets to their correct definitions.
2. Match types of budgets to their correct definitions.
3. State reasons for budgeting.
4. State limitations of budgets.
5. Arrange in order steps in developing a budget.
6. State kinds of physical data used in budgets.
7. Select from a list methods of arriving at a price estimate.
8. Select from a list uses of enterprise budgets.
9. State sections of an OSU Cooperative Extension Service Enterprise Budget.
10. Distinguish among characteristics of categories of returns in an enterprise budget.
11. State ways OSU Enterprise Budgets may be modified.
12. Select from a list uses of break-even analysis.
13. Obtain information from front of OSU Enterprise Budget.
14. Obtain information from back of OSU Enterprise Budget.
15. Modify front of OSU Enterprise Budget.
16. Modify back of OSU Enterprise Budget.
17. Compute break-even analysis.
18. Select and modify OSU Enterprise Budgets that represent enterprises in the present farming operation.

ENTERPRISE BUDGETS
UNIT VI

SUGGESTED ACTIVITIES

Unit contents

A. Objective sheet

B. Suggested activities

C. Supplement #1 — What Is Budgeting?

D. Information sheet

E. Transparency masters

  1. TM #1 — 100 Head Stocker Budget (Front)
  2. TM #2 — 100 Head Stocker Budget (Back)
  3. TM #3 — Irrigated Soybeans Budget (Front)
  4. TM #4 — Irrigated Soybeans Budget (Back)

F. Assignment sheets

  1. Assignment Sheet #1 — Obtain Information from Front of OSU Enterprise Budget
  2. Assignment Sheet #2 — Obtain Information from Back of OSU Enterprise Budget
  3. Assignment Sheet #3 — Modify Front of OSU Enterprise Budget
  4. Assignment Sheet #4 — Modify Back of OSU Enterprise Budget
  5. Assignment Sheet #5 — Compute Break-Even Analysis
  6. Assignment Sheet #6 — Select and Modify OSU Enterprise Budgets That Represent Enterprises in the Present Farming Operation

G. Answers to assignment sheets

H. Test

I. Answers to test

SUGGESTED ACTIVITIES

II. Instructor's guide

A. Order materials to supplement unit.

1. *Oklahoma Enterprise Budget Book* (State), and quantity of *Enterprise Budget Book* subscription forms

(NOTE: Order from Farm Management Extension, Room 513, Ag Hall, Oklahoma State University, Stillwater, Oklahoma 74078.)

2. Localized *Enterprise Budget Book* for program's area of the state

(NOTE: Order from Farm Management Extension, Room 513, Ag Hall, Oklahoma State University, Stillwater, Oklahoma 74078; or contact your Area Extension Farm Management Specialist or County Extension Director.)

3. *Operation of the Enterprise Budget Generator*

(NOTE: Order one copy from Farm Management Extension, Room 513, Ag Hall, Oklahoma State University, Stillwater, Oklahoma 74078.)

B. Make transparencies; make transparency or copies of supplement as appropriate.

C. Provide cooperators with objective sheet.

D. Discuss unit and specific objectives

1. Explain that the word *budget* ordinarily suggests a formal plan written down on paper, and that most people make no formal or written plans, but simply calculate ahead in a rough way and count on working out the details as they occur. This method is still called *budgeting*, but it is a mental rather than a written form.

Emphasize that if cooperators have considerable experience, they may be able to adjust their business in this way, particularly if the farm is simple in its organization and if the operation has been fitted to an economic environment that has not changed. However, a young farmer with a limited background of experiences usually needs a more definite plan for a guide. Also, an established farmer may need to do some formal figuring when conditions change enough to alter the profitability of various alternate enterprises or methods.

SUGGESTED ACTIVITIES

2. Point out that the ranch family that has only grazing land and produces beef cattle alone still must do some planning as prices change. For instance, should the family liquidate part of their herd while prices are high and then build it back up after prices drop? Would shifts or returns be greater or smaller if the family were to shift from a system that includes feeder calves sold from cows in the fall to one keeping fewer cows and grazing the calves through to be sold as yearling feeders? Should the ranch family use surplus earnings to pay off the existing mortgage or should they add to their holdings? Emphasize that a budget is a management tool that can be used to help answer these questions.

E. Provide cooperators with information and assignment sheets.

F. Discuss information and assignment sheets.

1. Emphasize the importance of completing the assignment sheets: the OSU Enterprise Budgets will be used extensively in Unit VII, "Cash Flow Planning."

2. Discuss Objective 1, pointing out the importance of defining terms for common understanding. Show Supplement #1, "What Is Budgeting?" Discuss the following questions.

   - How do you begin to evaluate your farm business?
   - What crops should you grow?
   - What part of your land should be used for crops and what part for livestock?
   - Should you buy a new piece of equipment?
   - Can you economically justify the purchase of a larger tractor?

3. Point out when discussing Objective 2 that whole farm, partial, and cash-flow budgets will be discussed in other units of the curriculum. In discussing enterprise budgets, point out that most cooperators do not do the detail work involved in enterprise budgeting; but rather they use prepared representative budgets, and modify them to represent their own situations more closely. The Oklahoma State University Cooperative Extension Service has developed representative budgets for major crop and livestock enterprises in Oklahoma.

SUGGESTED ACTIVITIES

4. Discuss Objectives 3 and 4. Emphasize the importance of pushing a pencil before committing resources. Use quotation, "If you can't farm with a pencil, you sure can't farm with a tractor." Point out that the budget is computed in terms of production and price expectancy.

   EXAMPLES: You do not plan to produce a certain number of dollar's worth of hogs, but to breed, for instance, fifteen sows, from which you count on raising 240 pigs to a weight of 230 pounds. To do this, you estimate that you will need 920 pounds of feed per pig, or 110.4 tons of feed in all.

   Similarly, you do not plan to produce a wheat crop worth $8,000, but to estimate that, with the most productive cropping system and normal weather conditions for your farm, 100 acres of wheat, which will yield 2,000 bushels of wheat, can be grown. Likewise, you do not expect with certainty that you will sell your wheat crop at $3.70 per bushel. Instead, you estimate that your crop will probably average that price in the year ahead.

5. Discuss Objective 5, explaining that although cooperators as farm producers may lack the information necessary to make perfect decisions, they are forced to make decisions on the basis of the information they possess. Cooperators can use an enterprise budget to classify the information they possess in such a manner that they can analyze the information and form a plan of action.

6. Discuss Objectives 6 through 8. Emphasize the importance of goals and objectives, and a complete and accurate set of records. Explain that supplemental records are very valuable for gathering physical data such as fertilizer rates, yields, herbicides, calving percentages. Point out that actual historical prices for a specified period are probably most commonly used in budgeting. Historical prices have merit because even though the general level of prices in the future may turn out to be different from those of the historical period, relative prices will generally be quite similar. If the budget is for a year or two, then current prices may be appropriate.

SUGGESTED ACTIVITIES

7. Discuss Objective 9. Show the areas of Oklahoma used for the *Oklahoma Enterprise Budget Book*. Point out the name and address of the Area Extension Farm Management specialist serving your area. These state and area enterprise budgets can be used as the basis for the cooperator's budgeting and planning procedures. Use Transparencies #1 through #4 to illustrate the sections of an OSU Enterprise Budget. Additional discussion of Objective 9 may include the following information.

   a. *Operating inputs* — The front of the budget lists all operating inputs that have gone into the production of the product. Inputs in this section coincide with the typical definition of variable costs. Except for enterprises that have more than one sale period, annual operating capital is calculated by multiplying the amount required each month times the portion of the year that the amount will be outstanding. For enterprises with more than one sale period, net expenses for each month are used to calculate annual capital, and labor charges for each month are used to calculate annual capital. Labor charges may be included if labor must be hired; operator or family labor is usually charged as a fixed cost.

   EXAMPLE:

WHEAT - LOAM SOILS
CUSTOM COMBINE & HAULING

76700804
08/01/83
WESTSOUTHCENTRAL

OPERATING INPUTS:	UNITS	PRICE	QUANTITY	VALUE	YOUR VALUE
WHEAT SEED	BU.	4.750	1.250	5.94	________
NITROGEN (N)	LBS.	0.220	90.000	19.80	________
PHOSPH (P205)	LBS.	0.180	20.000	3.60	________
POTASH (K20)	LBS.	0.180	20.000	3.60	________
SPRAYER	ACRE	3.750	1.000	3.75	________
CUSTOM COMBINE	ACRE	16.000	1.000	16.00	________
CUSTOM HAULING	BU.	0.150	32.000	4.80	________
MISCL EXPENSE	BU.	0.150	12.000	1.80	________
ANNUAL OPERATING CAPITAL	DOL.	0.130	27.887	3.63	________
LABOR CHARGES	HR.	4.250	1.549	6.58	________
MACHINERY FUEL,LUBE,REPAIRS	ACRE			11.85	________
[illegible] OPERATING COST				81.35	________

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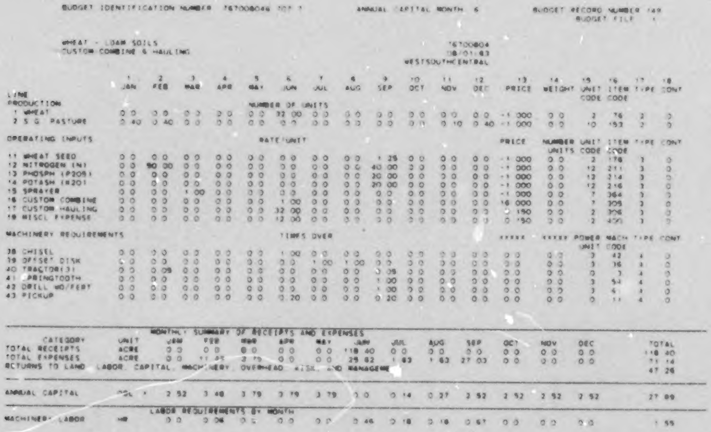
SUGGESTED ACTIVITIES

On the back of the budget, operating inputs are broken down by month. This type of information may be quite useful in planning the purchase of operating inputs. This section also shows the machinery requirement by month, which may be useful in providing the necessary data to produce a yearly machinery flow. Next is a monthly summary of receipts and expenses. This section lists the timing of receipts and expenses by month and the amount of each. These data are useful in completing an enterprise cash flow projection. The labor requirements are broken down by months. These data make it possible to produce a labor flow budget to plan total labor needs.

EXAMPLE:



```
     BUDGET IDENTIFICATION NUMBER  76700804G TOT 1        ANNUAL CAPITAL MONTH  6        BUDGET RECORD NUMBER 149
                                                                                                  BUDGET FILE   1

     WHEAT - LOAM SOILS                                                        76700804
     CUSTOM COMBINE & HAULING                                                  08/01/83
                                                                        WESTSOUTHCENTRAL

                       1     2     3     4     5     6     7     8     9    10    11    12     13     14    15   16   17   18
                      JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC   PRICE WEIGHT UNIT ITEM TYPE CONT
LINE                                                                                                      CODE CODE
PRODUCTION                                  NUMBER OF UNITS
  1 WHEAT             0.0   0.0   0.0   0.0   0.0  32.00  0.0   0.0   0.0   0.0   0.0   0.0  -1.000   0.0    2   76    2    0
  2 S G  PASTURE      0.40  0.40  0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.10  0.40 -1.000   0.0   10  153    2    0

OPERATING INPUTS                              RATE/UNIT                                     PRICE  NUMBER UNIT ITEM TYPE CONT
                                                                                                   UNITS  CODE CODE
 11 WHEAT SEED        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   1.25  0.0   0.0   0.0  -1.000   0.0    2  178    3    0
 12 NITROGEN (N)      0.0  90.00  0.0   0.0   0.0   0.0   0.0   0.0  40.00  0.0   0.0   0.0  -1.000   0.0   12  211    3    0
 13 PHOSPH (P205)     0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  20.00  0.0   0.0   0.0  -1.000   0.0   12  214    3    0
 14 POTASH (K20)      0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  20.00  0.0   0.0   0.0  -1.000   0.0   12  216    3    0
 15 SPRAYER           0.0   0.0   1.00  0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  -1.000   0.0    7  364    3    0
 16 CUSTOM COMBINE    0.0   0.0   0.0   0.0   0.0   1.00  0.0   0.0   0.0   0.0   0.0   0.0  16.000   0.0    7  305    3    0
 17 CUSTOM HAULING    0.0   0.0   0.0   0.0   0.0  32.00  0.0   0.0   0.0   0.0   0.0   0.0   0.190   0.0    2  306    3    0
 18 MISCL EXPENSE     0.0   0.0   0.0   0.0   0.0  12.00  0.0   0.0   0.0   0.0   0.0   0.0   0.150   0.0    2  400    3    0

MACHINERY REQUIREMENTS                        TIMES OVER                                    *****  ***** POWER MACH TYPE CONT
                                                                                                         UNIT CODE
 38 CHISEL            0.0   0.0   0.0   0.0   0.0   1.00  0.0   0.0   0.0   0.0   0.0   0.0   0.0    0.0    3   42    4    0
 39 OFFSET DISK       0.0   0.0   0.0   0.0   0.0   0.0   1.00  1.00  0.0   0.0   0.0   0.0   0.0    0.0    3   16    4    0
 40 TRACTOR(3)        0.0   0.05  0.0   0.0   0.0   0.0   0.0   0.0   0.05  0.0   0.0   0.0   0.0    0.0    0    3    4    0
 41 SPRINGTOOTH       0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   1.00  0.0   0.0   0.0   0.0    0.0    3   54    4    0
 42 DRILL WO/FERT     0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   1.00  0.0   0.0   0.0   0.0    0.0    3    6    4    0
 43 PICKUP            0.0   0.0   0.0   0.0   0.0   0.20  0.0   0.0   0.20  0.0   0.0   0.0   0.0    0.0    0   11    4    0

--------------------------------------------------------------------------------------------------------------------------
                           MONTHLY SUMMARY OF RECEIPTS AND EXPENSES
      CATEGORY        UNIT     JAN    FEB    MAR    APR    MAY    JUN    JUL    AUG    SEP    OCT    NOV    DEC       TOTAL
TOTAL RECEIPTS        ACRE     0.0    0.0    0.0    0.0    0.0  118.40   0.0    0.0    0.0    0.0    0.0    0.0      118.40
TOTAL EXPENSES        ACRE     0.0   11.45   2.75   0.0    0.0   25.82   1.63   1.63  27.03   0.0    0.0    0.0       71.14
RETURNS TO LAND  LABOR, CAPITAL, MACHINERY, OVERHEAD, RISK, AND MANAGEMENT                                            47.26
--------------------------------------------------------------------------------------------------------------------------
ANNUAL CAPITAL        PCL *   2.52   3.40   3.79   3.79   3.79   0.0    0.14   0.27   2.52   2.52   2.52   2.52       27.89
--------------------------------------------------------------------------------------------------------------------------
                           LABOR REQUIREMENTS BY MONTH
MACHINERY LABOR       HR       0.0    0.06   0.0    0.0    0.0    0.46   0.18   0.18   0.67   0.0    0.0    0.0        1.55
```

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SUGGESTED ACTIVITIES

b. *Fixed costs* — Each cost is computed separately, then added to give the total fixed costs. Interest on investment, depreciation, taxes, and insurance are calculated. Representative enterprise budgets show no land charges due to the difficulty in assigning a specific value to this resource. Cooperators could use a rental rate, equitable return on land capital investment, a debt-servicing commitment, or some other charge that is applicable to their situation. Land taxes or other land charges should be included.

EXAMPLE:

```
----------------------------------------------------------------------------
FIXED COSTS                                  VALUE  YOUR VALUE

  MACHINERY
    INTEREST AT 13.0%           DOL.         8.870  __________
    DEPR.,TAXES,INSUR.          DOL.         9.887  __________
  LAND
    INTEREST AT  0.0%           DOL.         0.0    __________
    TAXES                       DOL.         0.0    __________

TOTAL FIXED COSTS                           18.76   __________
```

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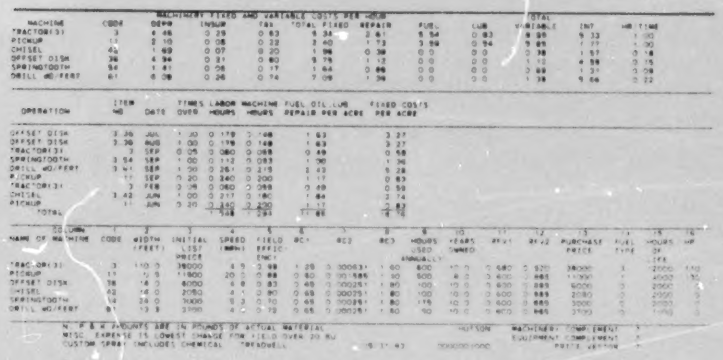
The back of the budget shows fixed costs broken down on a per hour and on a per acre basis. Variable costs for machinery and equipment are also calculated.

(NOTE: You may wish to review Unit VIII, "Machinery Economics," in *Farm Business Management: Volume II* for more information on machinery and equipment cost calculations.)

EXAMPLE:



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SUGGESTED ACTIVITIES

c. *Production* — This section itemizes products and their values. Share rental may be shown by reducing the yield by the percentage of the share agreement. Livestock budgets will state grazing requirements, and some crop and pasture budgets will list the amount of grazing provided. Review animal unit months (AUMs) with the cooperators.

(NOTE: You may wish to review Unit V, "Present Farm Plan," in *Farm Business Management: Volume III* for more information on animal unit months.)

EXAMPLE:

```
-------------------------------------------------------------------------------
PRODUCTION:                     UNITS    PRICE   QUANTITY     VALUE  YOUR VALUE

  WHEAT                         BU       3.700     32.000    118.40  __________
  S.G. PASTURE                  AUMS     0.0        1.300      0.0   __________

TOTAL RECEIPTS                                               118.40  __________
```

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d. *Returns* — Returns above total operating costs (production minus total operating cost) and returns above all costs except overhead, risk, and management (production minus [total operating cost plus total fixed costs]) are the only two returns calculated on the front of the budget.

EXAMPLE:

```
------------------------------------------------------------  ------------------
RETURNS ABOVE TOTAL OPERATING COSTS                           37.05  __________

RETURNS ABOVE ALL COSTS EXCEPT
    OVERHEAD,RISK AND MANAGEMENT                              18.29  __________
-------------------------------------------------------------------------------
```

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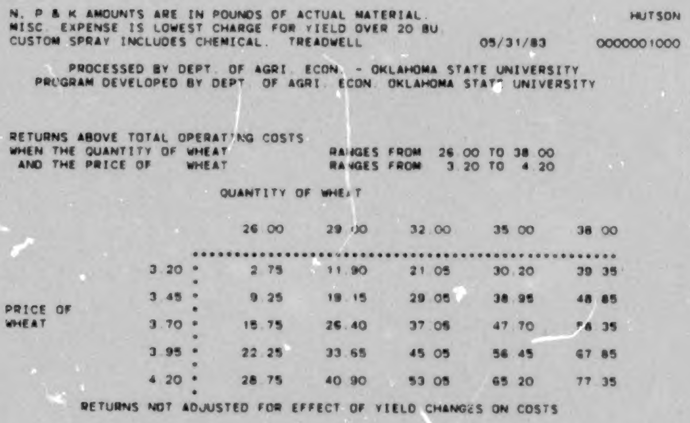
SUGGESTED ACTIVITIES

e. *Additional information* — Both the front and back of the budget will contain additional information.

(NOTE: You may wish to review *Operation of the Enterprise Budget Generator* before modifying or starting budgets.)

EXAMPLES: Budget name, budget number, date run, representative area, fertilizer assumptions, break-even table, price vector, machinery complement, equipment complement



```
N, P & K AMOUNTS ARE IN POUNDS OF ACTUAL MATERIAL.                              HUTSON
MISC. EXPENSE IS LOWEST CHARGE FOR YIELD OVER 20 BU.
CUSTOM SPRAY INCLUDES CHEMICAL.  TREADWELL                    05/31/83      0000001000

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   PROGRAM DEVELOPED BY DEPT. OF AGRI. ECON. OKLAHOMA STATE UNIVERSITY


RETURNS ABOVE TOTAL OPERATING COSTS
WHEN THE QUANTITY OF WHEAT              RANGES FROM  26.00 TO 38.00
 AND THE PRICE OF    WHEAT              RANGES FROM   3.20 TO  4.20

                        QUANTITY OF WHEAT

                     26.00      29.00      32.00      35.00      38.00

                 ****************************************************
              3.20 *      2.75      11.90      21.05      30.20      39.35
                   *
              3.45 *      9.25      19.15      29.05      38.95      48.85
PRICE OF           *
WHEAT         3.70 *     15.75      26.40      37.05      47.70      58.35
                   *
              3.95 *     22.25      33.65      45.05      56.45      67.85
                   *
              4.20 *     28.75      40.90      53.05      65.20      77.35
                   *
         RETURNS NOT ADJUSTED FOR EFFECT OF YIELD CHANGES ON COSTS
```

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8. Discuss Objective 10. Have cooperators complete Assignment Sheets #1 and #2.

9. Discuss Objective 11. Have cooperators complete Assignment Sheets #3 and #4. Be sure to point out the acceptable ways to modify the back of an OSU Enterprise Budget if you plan to send the modified budget to the computer center for another run. There is a fee for having a modified or new budget run. Obtain forms for developing new livestock and crop enterprise budgets, and send modified budgets to Farm Management Extension, Room 513, Ag Hall, Oklahoma State University, Stillwater, Oklahoma 74078.

10. Discuss Objective 12. Have cooperators complete Assignment Sheet #5.

(NOTE: You may wish to review principles of agricultural economics, primarily in the area of production functions.)

SUGGESTED ACTIVITIES

11. Have cooperators complete Assignment Sheet #6 for their farming or ranching operation. Remind cooperators that enterprise budgets will be used several times during the course, and that it is important to be able to complete such a budget.

G. During scheduled on-farm instructions, have cooperators modify at least two enterprise budgets for their farming operation.

H. Give test.

I. Critique test.

J. Reteach if necessary.

III. Unit references

A. Hodgens, Jim, and Leland Myers. *Farm Business Management: Year I.* Stillwater, Oklahoma: State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1979.

B. Jobes, Raleigh. *Oklahoma Enterprise Budget Book.* Stillwater, Oklahoma: Oklahoma State University Cooperative Extension Service/Farm Management Extension, 1983.

C. Jobes, Raleigh. *Use of Budgets in Farm Management.* Stillwater, Oklahoma: Oklahoma State University Cooperative Extension Facts No. 139, 1976.

D. Kletke, Darrel D. *Operation of the Enterprise Budget Generator.* Stillwater, Oklahoma: Oklahoma State University Agricultural Experiment Station Research Report P-790, 1979.

E. *National FFA Contests Bulletin No. 4 1982/1983/1984.* Alexandria, Virginia: National FFA Center, 1982.

F. Osburn, Donald D., and Kenneth C. Schneeberger. *Modern Agriculture Management.* Reston, Virginia: Reston Publishing Company, Inc., 1978.

G. Steward, Jim. *Farm Business Management: Volume II.* Stillwater, Oklahoma: State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1981.

H. Steward, Jim. *Farm Business Mangement: Volume III.* Stillwater, Oklahoma: State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1983.

SUGGESTED ACTIVITIES

SUPPLEMENT #1

What Is Budgeting?

ENTERPRISE BUDGETS
UNIT VI

INFORMATION SHEET

I. Terms and definitions

A. Budgeting — Systematic procedure for making decisions

B. Budget — Schedule of expected returns and costs

(NOTE: *Budget* ordinarily suggests a formal plan written down on paper.)

C. Farm budget — Plan for the future use of land, labor, capital, and management resources of the farm

D. Fixed costs — Costs incurred by the farm business that do not vary with the level of production in the short run

EXAMPLES: Interest on investment, depreciation, taxes, insurance

E. Variable costs — Operating costs that change directly with the level of production because of the different amounts of variable input needed at different levels of output

(NOTE: Variable costs are sometimes called *out-of-pocket* costs.)

EXAMPLES: Feed, seed, fertilizer, fuel

F. Linear programming — Computational method of determining the best course of action from many alternatives, a specific objective, and limited means or resources

G. Enterprises — Building blocks of farm plans

(NOTE: An enterprise has defined or recognizable inputs and measurable outputs or services. Enterprises are most frequently distinguished by their products.)

EXAMPLES: Wheat, cow/calf, stockers, alfalfa hay, peanuts, watermelons

H. Competing enterprises — Enterprises that use the same resources at the same time; an increase in utilization of one enterprise results in a decrease in production of other

EXAMPLE: Oats and wheat compete for limited amount of land. An increase in the planting of one enterprise results in the decreased planting of the other.

INFORMATION SHEET

I. Complementary enterprises — Enterprises in which production of one contributes to production of the other

EXAMPLE: Forage and grain crops are grown where the forage crop actually adds to the grain crop's production. The forage crop may improve the tilth, decrease erosion, or supply nitrogen. All of these factors may increase grain yield.

J. Supplementary enterprises — Enterprises that are noncompeting or independent of other enterprises on the farm

(NOTE: Supplementary enterprises make use of resources not being used by competing or complementary enterprises.)

EXAMPLE: A small poultry enterprise uses family labor that would not otherwise be used.

K. Cost of production — Monetary outlay for fixed and variable input factors needed to obtain output

L. Unit of input — Factor of production or basic resource

(NOTE: The unit of input may be fixed or variable.)

M. Unit of output — Unit of production resulting from the combination of variable and fixed inputs

N. Total costs — Sum of total fixed and total variable costs

O. Overhead — Receipts and expenses that are difficult to allocate to a specific tax category or enterprise

EXAMPLES: Tools, machine shop utilities, real estate taxes, patronage refund

P. Animal unit month (AUM) — Amount of feed required to feed 1,000 pounds of livestock for one month

II. Types of budgets

A. Whole farm — Physical and financial plan for the entire farm business for some period of time

(NOTE: Whole farm budgets may also be referred to as *total* or *complete budgets*.)

B. Enterprise — Statement of expected returns and costs associated with one unit of an enterprise, usually for one production period

INFORMATION SHEET

C. Partial — Estimate of the economic effects of some change in the farm business

D. Cash flow — Projection of the cash inflows and outflows for a specific time period, usually one year

(NOTE: Cash-flow budgets or projections may also include labor and machinery requirements.)

III. Reasons for budgeting

A. To identify items that have several years of useful life

EXAMPLES: Machinery, equipment, buildings, established alfalfa stand

B. To evaluate risk

C. To use systematic approach to uncover items of cost or returns that might be overlooked

D. To use in refining present organization

EXAMPLE: To look at possible organizational changes or plans without committing resources

E. To use when seeking credit

F. To use as an organizational device

IV. Limitations of budgets

A. Difficult to compare budgets from one farm to another

(NOTE: Each farm situation is different, and the enterprise budget must account for these differences.)

B. Difficult to make accurate estimates of future prices and yields

(NOTE: Budgets deal with future actions. Cooperators must make use of the best information available at the time they are making the decision.)

C. Time-consuming to prepare

V. Steps in developing a budget

A. Appraise goals and objectives

B. Inventory farm resources

INFORMATION SHEET

C. Select enterprises to be budgeted

D. Select physical data to be used in production process

E. Select prices to apply to physical data

F. Calculate costs and returns

VI. Kinds of physical data used in budgets

A. Livestock feed requirements and production rates

B. Fuel and oil requirements

C. Crop yields

D. Seeding responses

E. Labor requirements

F. Fertilizer and spray responses

G. Machinery requirements

H. Production practices

VII. Methods of arriving at a price estimate

A. Use actual prices from previous year

B. Project price based on trends, production cycles, competition, or technology

C. Make arbitrary decision of future prices

D. Use actual prices from a specified period

E. Use price range estimates

EXAMPLES: Optimistic, pessimistic, expected

VIII. Uses of enterprise budgets

A. Estimating potential returns for particular farm enterprises

B. Estimating cost of production for different agricultural products

EXAMPLES: Out-of-pocket expense commitments, labor commitment

INFORMATION SHEET

C. Using linear programming or budgets for farm planning

(NOTE: Enterprise budgets may consider several factors at one time.)

D. Estimating cash flows during the year

E. Estimating size of farm needed to earn a certain return

F. Estimating effects of risk on an enterprise

G. Estimating break-even yields or prices

H. Computing partial budget analysis

IX. Sections of an OSU Cooperative Extension Service Enterprise Budget

A. Operating inputs

(NOTE: The front of the budget lists all operating inputs that have gone into the production of the product. Inputs in this section coincide with the typical definition of variable or operating costs. On the back of the budget, operating inputs are broken down by month.)

B. Fixed costs

(NOTE: The front of the budget lists fixed costs such as interest on investment, depreciation, insurance, and taxes. The back of the budget shows these costs broken down on a per-hour or per-acre basis.)

C. Production

(NOTE: The front of the budget shows what product are produced, the units the production is measured in, the expected price per unit, the amount of production, and the value of this production. The back of the budget shows production broken down by month.)

D. Returns

(NOTE: Generally, returns above total operating costs and returns above all costs except overhead, risk, and management are shown on the front of the budget. These returns and costs may be combined in different ways to yield additional management information.)

- E. Additional information

  (NOTE: Most budgets will list additional information to clarify assumptions made in completing the representative budget. A table showing quantities and prices of production and break-even returns above total operating costs is presented on some budgets.)

X. Characteristics of categories of returns in an enterprise budget (Assignment Sheets #1 and #2)

- A. Returns above total operating costs
  1. Returns cover variable costs
  2. In short run, as long as this return is positive, operator should continue to produce because at least part of the fixed cost will be paid, thus reducing losses
  3. If this return is negative, operator should not produce because variable costs are not being covered and losses would be minimized by not producing
- B. Returns above all costs except overhead, risk, and management
  1. Returns cover all costs
  2. In long run, this return must be positive or operator should consider another enterprise

XI. Ways OSU Enterprise Budgets may be modified (Assignment Sheets #3 and #4)

- A. Prices, yields, rates, practices, and costs can be changed to fit the farm situation
- B. Returns and costs can be combined in different ways
- C. Land may be charged as crop or cash rent
- D. Adjustments can be made for other soil or production conditions

XII. Uses of break-even analysis (Assignment Sheets #5 and #6)

- A. Comparing price or yield needed for a commodity with different costs

  EXAMPLE: $\frac{\text{Operating Cost}}{\text{Yield}} = \text{Price Needed to Recover Operating Costs}$
- B. Comparing price or quantity of input needed with different production returns
- C. Comparing competing enterprises for break-even points

```
100 HEAD STOCKER BUDGET, PER HEAD                                      13100236
BUY OCT 15 - SELL MAY 15:  STEERS                                      08/01/83
400# IN - 701# OUT, GRAZE-OUT - WHEAT                                 NORTHWEST

--------------------------------------------------------------------------------
  OPERATING INPUTS:                  UNITS    PRICE   QUANTITY     VALUE YOUR VALUE

    STR CALV(3-5) CH                 CWT.    73.000     4.080     297.84 __________
    21-25% PRO. SUP.                 LBS.     0.100   100.000      10.00 __________
    SALT & MIN.                      LBS.     0.090    19.000       1.71 __________
    TRUCKING                         HD.      2.700     1.000       2.70 __________
    SALES COMM.                      HD.      5.100     1.000       5.10 __________
    VET & MED.                       HD.      3.500     1.000       3.50 __________
    UTILITIES                        HD.      1.000     0.150       0.15 __________
    ANNUAL OPERATING CAPITAL         DOL.     0.140   186.668      26.13 __________
    MACHINERY LABOR                  HR.      4.250      1.39       5.91 __________
    EQUIPMENT LABOR                  HR.      4.250      1.13       4.80 __________
    LIVESTOCK LABOR                  HR.      4.250      1.45       6.16 __________
    TRACTOR, FUEL AND LUBE           DOL.                           6.79 __________
    TRACTOR REPAIR COST              DOL.                           0.53 __________
    EQUIPMENT COST                   DOL.                           2.27 __________

  TOTAL OPERATING COST                                            373.61 __________
--------------------------------------------------------------------------------
  FIXED COSTS                              AMOUNT         VALUE        YOUR VALUE
    MACHINERY
      INTEREST AT 14.00%                    13.18          1.85
      DEPR., TAXES, INSUR.                                 2.38        __________
    EQUIPMENT                                                          __________
      INTEREST AT 14.00%                    45.12          6.32
      DEPR., TAXES, INSUR.                                 8.29        __________
    LIVESTOCK                                                          __________
      HORSE                          3.40                         __________
      INTEREST AT 14.00%                     3.40          0.48
      DEPR., TAXES, INSUR.                                 0.15        __________
    LAND                                                               __________
      S.G. PASTURE        4.06 AUMS                        0.0
      INTEREST AT  0.0%                                    0.0         __________
      TAXES                                                0.0         __________
                                                                       __________
  TOTAL FIXED COST                                                 19.45 __________
--------------------------------------------------------------------------------
  PRODUCTION:                        UNITS    PRICE   QUANTITY     VALUE YOUR VALUE

    STOCKER STEERS                   CWT.    70.000     7.010     490.70 __________
--------------------------------------------------------------------------------
   RETURNS ABOVE TOTAL OPERATING COSTS                            117.09 __________

   RETURNS ABOVE ALL COSTS EXCEPT
      OVERHEAD, RISK AND MANAGEMENT                                97.64 __________
--------------------------------------------------------------------------------
100 HEAD STOCKER STEER BUDGET - BUY OCT. - SELL MAY                     HININGER
GRAZE-OUT WHEAT - OCT 15 TO MAR. 1 = 1.25#/DAY
MARCH 1 TO MAY 15 1.7#/DAY                                05/31/83   1000000000

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RETURNS ABOVE TOTAL OPERATING COSTS
WHEN THE QUANTITY OF STOCKER STEERS    RANGES FROM    6.51 TO  7.51
 AND THE PRICE OF    STOCKER STEERS    RANGES FROM   64.00 TO 76.00
                          QUANTITY OF STOCKER STEERS

                            6.51      6.76      7.01      7.26      7.51

                   **************************************************
                  64.00 *  43.03     59.03     75.03     91.03    107.03
                        *
                  67.00 *  62.56     79.31     96.06    112.81    129.56
PRICE OF                *
STOCKER STEERS    70.00 *  82.09     99.59    117.09    134.59    152.09
                        *
                  73.00 * 101.62    119.87    138.12    156.37    174.62
                        *
                  76.00 * 121.15    140.15    159.15    178.15    197.15
                        *
          RETURNS NOT ADJUSTED FOR EFFECT OF YIELD CHANGES ON COSTS
```

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FBM I - 501

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        BUDGET IDENTIFICATION NUMBER   131002363112111            ANNUAL CAPITAL MONTH  5           BUDGET RECORD NUMBER  69
                                                                                                           BUDGET FILE    1

        100 HEAD STOCKER BUDGET, PER HEAD                                                 13100236
        BUY OCT 15 - SELL MAY 15:  STEERS                                                 08/01/83
        400# IN - 701# OUT, GRAZE-OUT - WHEAT                                             NORTHWEST

                         1     2     3     4     5     6     7     8     9     10    11    12      13     14     15   16   17   18
 LINE                   JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC    PRICE  WEIGHT  UNIT ITEM TYPE CONT
 PRODUCTION                                           NUMBER OF UNITS                                           CODE CODE
   1 STOCKER STEERS     0.0   0.0   0.0   0.0   1.00  0.0   0.0   0.0   0.0   0.0   0.0   0.0   -1.000  7.010   16   16    2    0
 OPERATING INPUTS                                     RATE/UNIT                                PRICE  NUMBER  UNIT ITEM TYPE CONT
                                                                                                      UNITS   CODE CODE
 11 STR CALV(3-5) CH    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   1.02  0.0   0.0   -1.000  4.000   16   13    3    0
 12 S.G. PASTURE        0.50  0.53  0.60  0.66  0.58  0.0   0.0   0.0   0.0   0.20  0.42  0.46  -1.000  1.000   10  153    3    0
 14 21-25% PRO. SUP     0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0 100.00  0.0   0.0   -1.000  1.000   12  111    3    0
 15 SALT & MIN.         3.50  2.50  2.50  2.50  1.50  0.0   0.0   0.0   0.0   2.50  2.50  2.50  -1.000  1.000   12  103    3    0
 16 TRUCKING            0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   1.00  0.0   0.0    2.700  1.000    1  481    3    0
 17 SALES COMM.         0.0   0.0   0.0   0.0   1.00  0.0   0.0   0.0   0.0   0.0   0.0   0.0    5.100  1.000    1  405    3    0
 18 VET & MED           0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   1.00  0.0   0.0    3.500  1.000    1  416    3    0
 19 UTILITIES           0.03  0.03  0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.03  0.03  0.03   1.000  1.000    1  460    3    0
 MACHINERY REQUIREMENTS                               HOURS                                    XXXXX   XXXXX POWER MACH TYPE CONT
                                                                                                              UNIT CODE
 28 PICKUP              0.15  0.15  0.15  0.15  0.10  0.0   0.0   0.0   0.0   0.15  0.15  0.15   0.0     0.0     0    9    4    0
 EQUIPMENT REQUIREMENTS                                                                       NUMBER  PROPORT XXX EQUIP TYPE XXXX
                                                                                              UNITS   OF COST     CODE
 38 LOT FENCE                                                                                350.000   0.010   0    2    5    0
 39 WATER TANK                                                                                 1.000   0.010   0   21    5    0
 LIVESTOCK INVESTMENT
 40 HORSE
                                                                                               0.010   0.500   0   54    5    0


 49 LIVESTOCK LABOR     0.15  0.15  0.15  0.15  0.10  0.0   0.0   0.0   0.0   0.30  0.30  0.15

 -------------------------------------------------------------------------------------------------------------------------------------
                                  MONTHLY SUMMARY OF RECEIPTS AND EXPENDITURES
   CATEGORY           YEAR UNIT     JAN     FEB     MAR     APR     MAY     JUN     JUL     AUG     SEP     OCT     NOV     DEC          TOTAL
 TOTAL RECEIPTS         1 DOL.      0.0     0.0     0.0     0.0   490.70    0.0     0.0     0.0     0.0     0.0     0.0     0.0         490.70
 TOTAL VARIABLE COST    1 DOL.      1.49    1.49    1.46    1.46    6.16    0.0     0.0     0.0     0.0   315.53    1.49    1.49        330.58
 -------------------------------------------------------------------------------------------------------------------------------------
 ANNUAL CAPITAL         1 DOL.     26.67   26.79   26.91   27.04    0.0     0.0     0.0     0.0     0.0    26.29   26.42   26.54        186.67
 -------------------------------------------------------------------------------------------------------------------------------------
                                  LABOR REQUIREMENTS
 MACHINERY LABOR        1 HOUR      0.18    0.18    0.18    0.18    0.12    0.0     0.0     0.0     0.0     0.18    0.18    0.18          1.39
 LIVESTOCK LABOR        1 HOUR      0.15    0.15    0.15    0.15    0.10    0.0     0.0     0.0     0.0     0.30    0.30    0.15          1.45
 EQUIPMENT LABOR        1 HOUR      0.14    0.14    0.14    0.14    0.14    0.0     0.0     0.0     0.0     0.14    0.14    0.14          1.13
    TOTAL LABOR         1 HOUR      0.47    0.47    0.47    0.47    0.36    0.0     0.0     0.0     0.0     0.62    0.62    0.47          3.97
 -------------------------------------------------------------------------------------------------------------------------------------
                                  MACHINERY REQUIREMENTS BY MONTH
 PICKUP                   HOUR      0.17    0.17    0.17    0.17    0.11    0.0     0.0     0.0     0.0     0.17    0.17    0.17          1.26
 -------------------------------------------------------------------------------------------------------------------------------------
                   NO.            MONTHLY EQUIPMENT REQUIREMENTS AS A PROPORTION OF THE ITEMS WHOLE FARM USE
 LOT FENCE            **** 1 FEET   0.0012 0.0012 0.0012 0.0012 0.0012 0.0    0.0    0.0    0.0    0.0012 0.0012 0.0012             0.0100

 WATER TANK           1.0 1 GAL.    0.0012 0.0012 0.0012 0.0012 0.0012 0.0    0.0    0.0    0.0    0.0012 0.0012 0.0012             0.0100
 HORSE                0.0 1 HD      0.0625 0.0625 0.0625 0.0625 0.0625 0.0    0.0    0.0    0.0    0.0625 0.0625 0.0625             0.5000
          THE FINAL ENTRY IN EACH ROW REPRESENTS THE PROPORTION OF THE ITEMS TIME ALLOCATED TO THE BUDGET UNIT
 -------------------------------------------------------------------------------------------------------------------------------------
                                  MACHINERY FIXED AND VARIABLE COST PER HOUR
    MACHINE           CODE      DEPR      INSUR      TAX   TOTAL FIXED  REPAIR      FUEL      LUB      TOTAL         INT      HR/TIME
 PICKUP                  9      1.65      0.06       0.17      1.88      0.42       4.67      0.70     VARIABLE      1.46       1.00
                                                                                                         5.79
 -------------------------------------------------------------------------------------------------------------------------------------
                                  ANNUAL COST SUMMARY FOR EQUIPMENT AND LIVESTOCK
 LINE                                     LIST   DEPREC-              INSUR-                       FUEL      HOURS TOT OWN- TOT OPER-
 NO.      ITEM             SIZE  UNIT     PRICE  IATION   INTEREST    ANCE     TAXES  REPAIRS AND LUBE      LABOR ERSHP/YR ATING/YR
   2 LOT FENCE             1.00 FEET      25.00    2.08      1.75      0.07     0.13     0.63       0.0      0.30     2.28      0.63
  21 WATER TANK          250.00 GAL.     275.00   27.50     19.25      0.83     1.38     8.25       0.0      3.00    28.70      8.25
  54 HORSE                 1.00 HD.      800.00   30.00     95.20      0.0      0.0      0.0        0.0     10.00    30.00      0.0
 -------------------------------------------------------------------------------------------------------------------------------------
                                  ANNUAL CHARGES MADE IN THIS BUDGET FOR EQUIPMENT AND LIVESTOCK
 LINE                                  NUMBER   PROPOR   OWNERSHP OPERATING INTERST LABOR HOURS
 NO.       ITEM            SIZE  UNIT   ITEMS   CHARGED  CHARGES  CHARGES   CHARGES  CHARGED
   2 LOT FENCE             1.00 FEET   350.00     0.01     7.99     2.19      6.12     1.05
  21 WATER TANK          250.00 GAL.     1.00     0.01     0.30     0.08      0.19     0.03
  54 HORSE                 1.00 HD       0.01     0.50     0.15     0.0       0.48     0.05
 -------------------------------------------------------------------------------------------------------------------------------------
         COLUMN          1     2       3       4      5      6       7        8      9      10      11     12       13      14     15    16
 NAME OF MACHINE       CODE  WIDTH  INITIAL  SPEED  FIELD   RC1     RC2      RC3   HOURS   YEARS   RFV1   RFV2  PURCHASE  FUEL  HOURS  HP
                            (FEET)   LIST   (MPH)  EFFIC-                          USED    OWNED                 PRICE    TYPE    OF
                                     PRICE          ENCY                         ANNUALLY                                        LIFE
 PICKUP                   9    0.8    8500    20.0   0.88   0.60  0.000631   1.60   500     8.0   0.600  0.885    8500      1    8000  140
 -------------------------------------------------------------------------------------------------------------------------------------
     COLUMN---       1       2     3    4      5         6        7      8       9      10      11
                                                                      SALVAGE REPAIR FUEL & ANNUAL
                                             LIST   PURCHASE  YEARS  PROP OF   PROP   LUB AS HOURS
 ITEM NAME         CODE    SIZE UNIT TYPE   PRICE     PRICE    LIFE   LIST  OF LIST  PROP   LABOR
 LOT FENCE            2    1.00  18  2.00   25.00     25.00   12.00   0.0    0.300   0.0     0.30
 WATER TANK          21  250.00   5  2.00  275.00    275.00   10.00   0.0    0.300   0.0     3.00
 HORSE               54    1.00   1. 1.00  800.00    800.00    8.00   0.700  0.0     0.0    10.00
 -------------------------------------------------------------------------------------------------------------------------------------
         100 HEAD STOCKER STEER BUDGET - BUY OCT. - SELL MAY                        HININGER      MACHINERY COMPLEMENT  11
         GRAZE-OUT WHEAT - OCT 15 TO MAR  1 = 1.25#/DAY                                           EQUIPMENT COMPLEMENT  11
         MARCH 1 TO MAY 15 1.7#/DAY                                    08/31/83     1000000000           PRICE VECTOR   1

                          LINE CHANGE         LINE CHANGE        LINE CHANGE        LINE CHANGE        LINE CHANGE
 GENERAL NAME CHANGE-> 16  STOCKER STEERS
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TM #2

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IRRIGATED SOYBEANS                                                98700035
CUSTOM COMBINE & HAUL                                             01/03/83
                                                          WESTSOUTHCENTRAL
   -----------------------------------------------------------------------
   OPERATING INPUTS:                 UNITS    PRICE  QUANTITY     VALUE YOUR VALUE

     SOYBEAN SEED                    LBS.     0.170    60.000     10.20 ----------
     NITROGEN (N)                    LBS.     0.330    20.000      6.60 ----------
     PHOSPH (P2O5)                   LBS.     0.290    40.000     11.60 ----------
     POTASH (K2O)                    LBS.     0.140    20.000      2.80 ----------
     HERBICIDE                       ACRE    12.000     1.000     12.00 ----------
     CUSTOM COMBINE                  ACRE    16.000     1.000     16.00 ----------
     CUSTOM HAULING                  BU.      0.150    35.000      5.25 ----------
     MISCL EXPENSE                   BU.      0.150    10.000      1.50 ----------
     ANNUAL OPERATING CAPITAL        DOL.     0.170    37.396      6.36 ----------
     LABOR CHARGES                   HR.      4.250     4.764     20.24 ----------
     MACHINERY FUEL,LUBE,REPAIRS     ACRE                         16.21 ----------
     IRRIGATION FUEL,LUBE,REPAIRS    ACRE                         45.84 ----------

   TOTAL OPERATING COST                                          154.61 ----------
   -----------------------------------------------------------------------
   FIXED COSTS                                VALUE YOUR VALUE

     MACHINERY
       INTEREST AT 17.0%             DOL.    15.789 ----------
       DEPR.,TAXES,INSUR.            DOL.    13.252 ----------
     IRRIGATION
       INTEREST AT 17.0%             DOL.    36.720 ----------
       DEPR.,TAXES,INSUR.            DOL.    51.840 ----------
     LAND
       INTEREST AT  0.0%             DOL.     0.0   ----------
       TAXES                         DOL.     0.0   ----------

   TOTAL FIXED COSTS                        117.60  ----------
   -----------------------------------------------------------------------
   PRODUCTION:                       UNITS    PRICE  QUANTITY     VALUE YOUR VALUE

     SOYBEANS                        BU.      5.200    35.000    182.00 ----------
   -----------------------------------------------------------------------
   RETURNS ABOVE TOTAL OPERATING COSTS                            27.39 ----------

   RETURNS ABOVE ALL COSTS EXCEPT
       OVERHEAD,RISK AND MANAGEMENT                              -90.21 ----------
   -----------------------------------------------------------------------
N,PBK AMOUNTS ARE ACTUAL POUNDS OF MATERIAL. MISCL. EXPENSES IS          HUTSON
HARVEST CHARGE FOR YIELD OVER 25 BU. CUSTOM HERBICIDE
APPLICATION HERBICIDE IS TREFLAN AT 1 1/2 PINT RATE     11/24/82     0000001000

      PROCESSED BY DEPT. OF AGRI. ECON. - OKLAHOMA STATE UNIVERSITY
    PROGRAM DEVELOPED BY DEPT. OF AGRI. ECON. OKLAHOMA STATE UNIVERSITY


RETURNS ABOVE TOTAL OPERATING COSTS
WHEN THE QUANTITY OF SOYBEANS          RANGES FROM  25.00 TO 45.00
 AND THE PRICE OF    SOYBEANS          RANGES FROM   4.60 TO  5.80

                         QUANTITY OF SOYBEANS

                      25.00      30.00      35.00      40.00      45.00

                 *************************************************
             4.60 *    -38.11     -15.86       6.39      28.64      50.89
                  *
             4.90 *    -30.61      -6.86      16.89      40.64      64.39
PRICE OF          *
SOYBEANS     5.20 *    -23.11       2.14      27.39      52.64      77.89
                  *
             5.50 *    -15.61      11.14      37.89      64.64      91.39
                  *
             5.80 *     -8.11      20.14      48.39      76.64     104.89
                  *
        RETURNS NOT ADJUSTED FOR EFFECT OF YIELD CHANGES ON COSTS
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BUDGET IDENTIFICATION NUMBER· 907000300 757 7          ANNUAL CAPITAL MONTH 11          BUDGET RECORD NUMBER 338
                                                                                              BUDGET FILE   1

IRRIGATED SOYBEANS                                                    90700035
CUSTOM COMBINE & HAUL                                                 01/03/83
                                                                  WESTSOUTHCENTRAL

                        1     2     3     4     5     6     7     8     9    10    11    12      13      14   15   16   17   18
                       JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC   PRICE  WEIGHT UNIT ITEM TYPE CONT
LINE                                                                                                        CODE CODE
PRODUCTION                                 NUMBER OF UNITS
  1 SOYBEANS           0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0 33.00   0.0  -1.000    3.0    2.  98.  2.   0.

OPERATING INPUTS                               RATE/UNIT                                  PRICE  NUMBER UNIT ITEM TYPE CONT
                                                                                                  UNITS CODE CODE
 11 SOYBEAN SEED       0.0   0.0   0.0   0.0   0.0 60.00   0.0   0.0   0.0   0.0   0.0   0.0  -1.000    0.0   18. 190.  3.   0.
 12 NITROGEN (N)       0.0   0.0   0.0   0.0   0.0 30.00   0.0   0.0   0.0   0.0   0.0   0.0  -1.000    0.0   18. 211.  3.   0.
 13 PHOSPH (P2O5)      0.0   0.0   0.0   0.0   0.0 40.00   0.0   0.0   0.0   0.0   0.0   0.0  -1.000    0.0   18. 214.  3.   0.
 14 POTASH (K2O)       0.0   0.0   0.0   0.0   0.0 20.00   0.0   0.0   0.0   0.0   0.0   0.0  -1.000    0.0   18. 216.  3.   0.
 15 HERBICIDE          0.0   0.0   0.0   0.0   0.0  1.00   0.0   0.0   0.0   0.0   0.0   0.0  12.000    0.0    7. 230.  3.   0.
 16 CUSTOM COMBINE     0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  1.00   0.0  16.000    0.0    7. 250.  3.   0.
 17 CUSTOM HAULING     0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0 33.00   0.0   0.150    0.0    2. 365.  3.   0.
 18 MISCL EXPENSE      0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0 10.00   0.0   0.100    0.0    2. 400.  3.   0.

MACHINERY REQUIREMENTS                         TIMES OVER                                 XXXXX   XXXXX POWER MACH TYPE CONT
                                                                                                        UNIT CODE
 38 CHISEL             0.0   0.0  1.00   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0     0.0    0.0    3.  42.  4.   0.
 39 OFFSET DISK        0.0   0.0  1.00  1.00   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0     0.0    0.0    3.  37.  4.   0.
 40 SPRINGTOOTH        0.0   0.0   0.0   0.0   0.0  1.00   0.0   0.0   0.0   0.0   0.0   0.0     0.0    0.0    3.  34.  4.   0.
 41 PLANTER            0.0   0.0   0.0   0.0   0.0  1.00   0.0   0.0   0.0   0.0   0.0   0.0     0.0    0.0    3.  65.  4.   0.
 42 ROW CULTIVATOR     0.0   0.0   0.0   0.0   0.0  1.00  1.00   0.0   0.0   0.0   0.0   0.0     0.0    0.0    3.  63.  4.   0.
 43 PICKUP             0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  0.20   0.0   0.0     0.0    0.0    0.  11.  4.   0.


 49 ACIN IRRIG WATER   0.0   0.0   0.0   0.0   0.0   0.0  9.00  9.00  6.00   0.0   0.0   0.0

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                                  MONTHLY SUMMARY OF RECEIPTS AND EXPENSES
      CATEGORY          UNIT     JAN     FEB    MAR    APR    MAY    JUN    JUL    AUG    SEP    OCT    NOV    DEC        TOTAL
TOTAL RECEIPTS          ACRE     0.0     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0 132.00    0.0       132.00
TOTAL EXPENSES          ACRE     0.0     0.0   3.97   2.01    0.0  49.37  19.84  17.19  11.46   1.21  22.75    0.0       128.00
RETURNS TO LAND, LABOR, CAPITAL, MACHINERY, OVERHEAD, RISK, AND MANAGEMENT                                                   14.00
----------------------------------------------------------------------------------------------------------------------------
ANNUAL CAPITAL          DOL.     0.0     0.0   0.33   0.30   3.90   4.43   6.20   7.72   8.67   8.77    0.0    0.0        37.40
----------------------------------------------------------------------------------------------------------------------------
                                  LABOR REQUIREMENTS BY MONTH
MACHINERY LABOR         HR.      0.0     0.0   0.43   0.21    0.0   0.63   0.29    0.0    0.0   0.24    0.0    0.0         1.81
IRRIGATION LABOR        HR.      0.0     0.0    0.0    0.0    0.0    0.0   1.11   1.11   0.74    0.0    0.0    0.0         2.95
TOTAL LABOR             HR.      0.0     0.0   0.43   0.21    0.0   0.63   1.40   1.11   0.74   0.24    0.0    0.0         4.76
----------------------------------------------------------------------------------------------------------------------------
IRRIGATION WATER        INCH     0.0     0.0    0.0    0.0    0.0    0.0   9.00   9.00   6.00    0.0    0.0    0.0        24.00
----------------------------------------------------------------------------------------------------------------------------
                                  MACHINERY FIXED AND VARIABLE COSTS PER HOUR
                                                                                              TOTAL
     MACHINE            CODE     DEPR      INSUR.      TAX    TOTAL FIXED  REPAIR    FUEL     LUB.   VARIABLE    INT.    HR/TIME
TRACTOR(3)                3      4.46       0.25      0.63        5.34      2.61     6.07     0.91      9.59     6.97      1.00
PICKUP                   11      2.10       0.00      0.22        2.40      1.73     3.78     0.37      6.07     2.31      1.00
CHISEL                   42      1.69       0.07      0.20        1.96      0.38      0.0      0.0      0.38     2.31      1.00
OFFSET DISK              37      4.77       0.20      0.58        5.56      1.08      0.0      0.0      0.38     2.03      0.18
SPRINGTOOTH              34      1.41       0.36      0.17        1.64      0.88      0.0      0.0      1.08     5.00      0.17
PLANTER                  65      7.35       0.32      0.92        8.79      2.42      0.0      0.0      0.88     1.71      0.09
ROW CULTIVATOR           63      1.65       0.07      0.20        1.92      0.37      0.0      0.0      2.42     9.17      0.21
                                                                                                0.37     2.00      0.24
----------------------------------------------------------------------------------------------------------------------------
                   ITEM           TIMES  LABOR  MACHINE FUEL,OIL,LUB.,  FIXED COSTS
   OPERATION        NO.    DATE   OVER   HOURS   HOURS  REPAIR PER ACRE  PER ACRE
----------------------------------------------------------------------------------------------------------------------------
CHISEL             3-42    MAR    1.03  0.217   0.180        1.86           3.16
OFFSET DISK        3-37    MAR    1.00  0.209   0.173        2.01           4.30
OFFSET DISK        3-37    APR    1.00  0.209   0.173        2.01           4.30
SPRINGTOOTH        3-34    JUN    1.63  0.112   0.093        1.06           1.37
PLANTER            3-65    JUN    1.03  0.248   0.209        2.66           6.67
ROW CULTIVATOR     3-63    JUN    1.03  0.288   0.238        2.65           6.16
ROW CULTIVATOR     3-63    JUL    1.03  0.288   0.238        2.65           6.16
PICKUP               11    OCT    0.23  0.240   0.200        1.21           0.28
    TOTAL                                1.812   1.499      16.21          29.04
----------------------------------------------------------------------------------------------------------------------------
      COLUMN          1       2        3        4      5       6        7       8      9      10      11      12       13       14     15     16
NAME OF MACHINE     CODE   WIDTH   INITIAL   SPEED   FIELD    RC1      RC2     RC3   HOURS   YEARS   RFV1    RFV2   PURCHASE   FUEL  HOURS    HP
                          (FEET)    LIST    (MPH)   EFFIC-                          USED   OWNED                    PRICE     TYPE    OF
                                   PRICE            ENCY                          ANNUALLY                                          LIFE
TRACTOR(3)           3.   110.0    39000.    4.5    0.80    1.25  0.000631  1.40   600.   10.0   0.680   0.920    30600.     3.  12000.  110.
PICKUP              11.     0.3    11500.   20.0    0.80    0.60  0.001383  1.40   300.    0.0   0.680   0.005    11300.     1.   4000.  130.
OFFSET DISK         37.    12.0     9800.    4.8    0.83    0.63  0.000251  1.80   100.   10.0   0.600   0.085     3860.     0.   2000.    0.
CHISEL              42.    14.0     2850.    4.1    0.80    0.65  0.000251  1.80   100.   10.0   0.600   0.085     2030.     0.   2000.    0.
ROW CULTIVATOR      63.    12.0     2800.    3.8    0.76    1.00  0.000251  1.80   100.   10.0   0.600   0.085     2030.     0.   2000.    0.
SPRINGTOOTH         34.    24.0     3030.    5.3    0.70    0.65  0.000251  1.80   175.   10.0   0.600   0.085     2000.     0.   2000.    0.
PLANTER             65.    12.0     9500.    5.0    0.67    0.80  0.000631  1.40    60.   10.0   0.600   0.085     3300.     0.   1200.    0.
----------------------------------------------------------------------------------------------------------------------------
          N,P&K AMOUNTS ARE ACTUAL POUNDS OF MATERIAL. MISCL. EXPENSES IS          HUTSON     MACHINERY COMPLEMENT   7
          HARVEST CHARGE FOR YIELD OVER 25 BU. CUSTOM HERBICIDE                                EQUIPMENT COMPLEMENT   7
          APPLICATION HERBICIDE IS TREFLAN AT 1 1/2 PINT RATE    11/24/82     0000001000             PRICE VECTOR   7

***NO NAME CHANGES HAVE BEEN STORED WITH THIS BUDGET***

             SH CL   VALUE    SH CL    VALUE    SH CL    VALUE    SH CL    VALUE    SH CL    VALUE    SH CL    VALUE
IRRIGATION----->     3.000    2.030    1.530    0.390    0.850    3.[illegible]    0.300    1.170    0.100    [illegible].910
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ENTERPRISE BUDGETS
UNIT VI

ASSIGNMENT SHEET #1 — OBTAIN INFORMATION FROM FRONT OF OSU ENTERPRISE BUDGET

NAME ______________________ SCORE ______________

An enterprise budget based on one unit, an acre of land, or a livestock unit, is a good place to start when developing a present farm plan. Evaluation of all costs and income on this basis gives the net return per acre or animal unit.

Oklahoma State University has developed a series of enterprise budgets that provide estimated costs and returns for various crop and livestock programs used in Oklahoma. These budgets have been developed by state and area specialists working with producers and their actual producing enterprises. Each budget is designed to estimate a situation that groups of producers will be facing. Individuals may modify any budget to fit their specific operation.

These budgets are designed to serve as guidelines. Cooperators may have some differences in soil, labor, and machinery resources, and, thus, some differences in cost structure. A cooperator's enterprise records are the most valuable planning tool from which to evaluate cost structure. A primary purpose of the OSU Enterprise Budgets is to encourage cooperators who do not have complete records to consider their full cost of production in making decisions. If cooperators modify and change OSU Enterprise Budgets, the budgets will fit their own operation more closely and will be more beneficial planning tools.

PART I — Stocker Enterprise — Budget #13100236

Using the front of OSU Enterprise Budget #13100236 on the following page, obtain the information indicated below.

(NOTE: There are no land charges in this representative budget.)

A. Total operating cost ______________

B. Total fixed cost ______________

C. Selling weight of stocker steers ______________

D. Purchase weight of choice stocker steer calves ______________

E. Purchase price of choice stocker steer calves per hundredweight ______________

F. Returns above total operating costs ______________

G. Returns above all costs except overhead, risk, and management ______________

ASSIGNMENT SHEET #1

```
100 HEAD STOCKER BUDGET, PER HEAD                                          1[illegible]100236
BUY OCT 15 - SELL MAY 15:  STEERS                                            08/01/83
400# IN - 701# OUT, GRAZE-OUT WHEAT                                         NORTHWEST

  OPERATING INPUTS:                    UNITS     PRICE   QUANTITY      VALUE YOUR VALUE

    STR CALV(3-5) CH                   CWT.     73.000      4.080     297.84 __________
    21-25% PRO. SUP.                   LBS.      0.100    100.000      10.00 __________
    SALT & MIN.                        LBS.      0.090     19.000       1.71 __________
    TRUCKING                           HD.       2.700      1.000       2.70 __________
    SALES COMM.                        HD.       5.100      1.000       5.10 __________
    VET & MED.                         HD.       3.500      1.000       3.50 __________
    UTILITIES                          HD.       1.000      0.150       0.15 __________
    ANNUAL OPERATING CAPITAL           DOL.      0.140    186.668      26.13 __________
    MACHINERY LABOR                    HR.       4.250       1.39       5.91 __________
    EQUIPMENT LABOR                    HR.       4.250       1.13       4.80 __________
    LIVESTOCK LABOR                    HR.       4.250       1.45       6.16 __________
    TRACTOR, FUEL AND LUBE             DOL.                             6.79 __________
    TRACTOR REPAIR COST                DOL.                             0.53 __________
    EQUIPMENT COST                     DOL.                             2.27 __________

  TOTAL OPERATING COST                                                373.61 __________

  FIXED COSTS                               AMOUNT          VALUE              YOUR VALUE
    MACHINERY
      INTEREST AT 14.00%                     13.18           1.85              __________
      DEPR., TAXES, INSUR.                                   2.38              __________
    EQUIPMENT
      INTEREST AT 14.00%                     45.12           6.32              __________
      DEPR., TAXES, INSUR.                                   8.29              __________
    LIVESTOCK
        HORSE                          3.40                                 __________
      INTEREST AT 14.00%                      3.40           0.48              __________
      DEPR., TAXES, INSUR.                                   0.15              __________
    LAND
      S.G. PASTURE          4.06 AUMS                        0.0               __________
      INTEREST AT  0.0%                                      0.0               __________
      TAXES                                                  0.0               __________

  TOTAL FIXED COST                                                     19.45 __________

  PRODUCTION:                          UNITS     PRICE   QUANTITY      VALUE YOUR VALUE

    STOCKER STEERS                     CWT.     70.000      7.010     490.70 __________

   RETURNS ABOVE TOTAL OPERATING COSTS                                117.09 __________

   RETURNS ABOVE ALL COSTS EXCEPT
       OVERHEAD, RISK AND MANAGEMENT                                   97.64 __________

100 HEAD STOCKER STEER BUDGET - BUY OCT. - SELL MAY                        HININGER
GRAZE-OUT WHEAT - OCT 15 TO MAR. 1 = 1.25#/DAY
MARCH 1 TO MAY 15 1.7#/DAY                                  05/31/83     1000000000

        PROCESSED BY DEPT. OF AGRI. ECON. - OKLAHOMA STATE UNIVERSITY


RETURNS ABOVE TOTAL OPERATING COSTS
WHEN THE QUANTITY OF STOCKER STEERS   RANGES FROM   6.51 TO  7.51
 AND THE PRICE OF    STOCKER STEERS   RANGES FROM  64.00 TO 76.00
                           QUANTITY OF STOCKER STEERS

                          6.51       6.76       7.01       7.26       7.51

                   *************************************************
               64.00 *    43.03      59.03      75.03      91.03     107.03
                     *
               67.00 *    62.56      79.31      96.06     112.81     129.56
PRICE OF             *
STOCKER STEERS 70.00 *    82.09      99.59     117.09     134.59     152.09
                     *
               73.00 *   101.62     119.87     138.12     156.37     174.62
                     *
               76.00 *   121.15     140.15     159.15     178.15     197.15
                     *
       RETURNS NOT ADJUSTED FOR EFFECT OF YIELD CHANGES ON COSTS
```

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ASSIGNMENT SHEET #1

PART II — Irrigated Soybeans Enterprise — Budget #98700035

Using the front of OSU Enterprise Budget #98700035 on the following page, obtain the information indicated below.

(NOTE: There are no land charges in this representative budget.)

A. What quantity of soybean seed was purchased? ____________

B. What is the price of nitrogen fertilizer? ____________

C. What is the total operating cost? ____________

D. At what rate is Treflan herbicide applied? ____________

E. What is the interest rate for machinery and irrigation investment? ____________

F. What are the returns above all costs except overhead, risk, and management? ____________

G. What is the yield per acre? ____________

ASSIGNMENT SHEET #1

```
IRRIGATED SOYBEANS                                                           98700035
CUSTOM COMBINE & HAUL                                                        01/03/83
                                                                     WESTSOUTHCENTRAL
   ----------------------------------------------------------------------------------
   OPERATING INPUTS:                  UNITS   PRICE  QUANTITY      VALUE YOUR VALUE

     SOYBEAN SEED                     LBS.    0.170    60.000      10.20 ----------
     NITROGEN (N)                     LBS.    0.330    20.000       6.60 ----------
     PHOSPH (P2O5)                    LBS.    0.290    40.000      11.60 ----------
     POTASH (K2O)                     LBS.    0.140    20.000       2.80 ----------
     HERBICIDE                        ACRE   12.000     1.000      12.00 ----------
     CUSTOM COMBINE                   ACRE   16.000     1.000      16.00 ----------
     CUSTOM HAULING                   BU.     0.150    35.000       5.25 ----------
     MISCL EXPENSE                    BU.     0.150    10.000       1.50 ----------
     ANNUAL OPERATING CAPITAL         DOL.    0.170    37.396       6.36 ----------
     LABOR CHARGES                    HR.     4.250     4.764      20.24 ----------
     MACHINERY FUEL,LUBE,REPAIRS      ACRE                         16.21 ----------
     IRRIGATION FUEL,LUBE,REPAIRS     ACRE                         45.84 ----------

   TOTAL OPERATING COST                                           154.61 ----------
   ----------------------------------------------------------------------------------
   FIXED COSTS                                VALUE YOUR VALUE


     MACHINERY
       INTEREST AT 17.0%              DOL.   15.789 ----------
       DEPR.,TAXES,INSUR.             DOL.   13.252 ----------
     IRRIGATION
       INTEREST AT 17.0%              DOL.   36.720 ----------
       DEPR.,TAXES,INSUR.             DOL.   51.840 ----------
     LAND
       INTEREST AT  0.0%              DOL.    0.0   ----------
       TAXES                          DOL.    0.0   ----------

   TOTAL FIXED COSTS                         117.60 ----------
   ----------------------------------------------------------------------------------
   PRODUCTION:                        UNITS   PRICE  QUANTITY      VALUE YOUR VALUE


     SOYBEANS                         BU.     5.200    35.000     182.00 ----------
   ----------------------------------------------------------------------------------
   RETURNS ABOVE TOTAL OPERATING COSTS                             27.39 ----------

   RETURNS ABOVE ALL COSTS EXCEPT
       OVERHEAD,RISK AND MANAGEMENT                               -90.21 ----------
   ----------------------------------------------------------------------------------
N,PEK AMOUNTS ARE ACTUAL POUNDS OF MATERIAL. MISCL. EXPENSES IS               HUTSON
HARVEST CHARGE FOR YIELD OVER 25 BU. CUSTOM HERBICIDE
APPLICATION HERBICIDE IS TREFLAN AT 1 1/2 PINT RATE      11/24/82         0000001000

      PROCESSED BY DEPT. OF AGRI. ECON. - OKLAHOMA STATE UNIVERSITY
   PROGRAM DEVELOPED BY DEPT. OF AGRI. ECON. OKLAHOMA STATE UNIVERSITY


RETURNS ABOVE TOTAL OPERATING COSTS
WHEN THE QUANTITY OF SOYBEANS          RANGES FROM  25.00 TO 45.00
 AND THE PRICE OF    SOYBEANS          RANGES FROM   4.60 TO  5.80

                       QUANTITY OF SOYBEANS

                      25.00      30.00      35.00      40.00      45.00

                 ******************************************************
            4.60 *   -38.11     -15.86       6.39      28.64      50.89
                 *
            4.90 *   -30.61      -6.86      16.89      40.64      64.39
PRICE OF         *
SOYBEANS    5.20 *   -23.11       2.14      27.39      52.64      77.89
                 *
            5.50 *   -15.61      11.14      37.89      64.64      91.39
                 *
            5.80 *    -8.11      20.14      48.39      76.64     104.89
                 *
        RETURNS NOT ADJUSTED FOR EFFECT OF YIELD CHANGES ON COSTS
```

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ENTERPRISE BUDGETS
UNIT VI

ASSIGNMENT SHEET #2 — OBTAIN INFORMATION FROM BACK OF OSU ENTERPRISE BUDGET

NAME ______________________________ SCORE ______________

The input information entered and computed on the back of an OSU Enterprise Budget is used to develop the output information on the front of the budget.

Sections of the budget include timing of production, operating inputs, and machinery requirements; a monthly summary of receipts and expenses; labor requirements by month; calculations of machinery costs; and a list of machinery.

PART I — Stocker Enterprise — Budget #13100236

Using the back of OSU Enterprise Budget #13100236 on the following page, obtain the information indicated below.

(NOTE: The -1.000 under *Price* indicates that the budget is using current prices listed in the price vector. These prices are updated periodically.)

A. What month are stocker steers sold? ______________

B. What is the quantity of protein supplement purchased in October? ______________

C. What is the total labor requirement for March? ______________

D. How many hours per steer is the pickup driven in April? ______________

E. What are the total receipts in May? ______________

F. What was the price per head charged for veterinary medicine? ______________

G. What are the fixed costs per hour of the pickup? ______________

ASSIGNMENT SHEET #2

```
BUDGET IDENTIFICATION NUMBER  131002363112111        ANNUAL CAPITAL MONTH  5          BUDGET RECORD NUMBER  89
                                                                                            BUDGET FILE    1

100 HEAD STOCKER BUDGET, PER HEAD                                        13100236
BUY OCT 15 - SELL MAY 15, STEERS                                         08/03/83
400# IN - 701# OUT, GRAZE-OUT WHEAT                                      NORTHWEST

                       1     2     3     4     5     6     7     8     9     10    11    12      13      14    15   16   17   18
                      JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC    PRICE  WEIGHT UNIT ITEM TYPE CONT
LINE                                                                                                        CODE CODE
PRODUCTION                                   NUMBER OF UNITS
  1 STOCKER STEERS    0.0   0.0   0.0   0.0   1.00  0.0   0.0   0.0   0.0   0.0   0.0   0.0   -1.000   7.010  16   16    2    0

OPERATING INPUTS                              RATE/UNIT                                         PRICE  NUMBER UNIT ITEM TYPE CONT
                                                                                                        UNITS CODE CODE
 11 STR CALV(3-5) CH  0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   1.02  0.0   0.0   -1.000   4.000  16   13    3    0
 12 S.G. PASTURE      0.50  0.53  0.60  0.65  0.69  0.0   0.0   0.0   0.0   0.20  0.42  0.46  -1.000   1.000  10  153    3    0
 14 21-25% PRO. SUP.  0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0 100.00  0.0   0.0   -1.000   1.000  12  111    3    0
 15 SALT & MIN.       2.50  2.50  2.50  2.50  1.50  0.0   0.0   0.0   0.0   2.50  2.50  2.50  -1.000   1.000  12  103    3    0
 16 TRUCKING          0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   1.00  0.0   0.0    2.700   1.000   1  481    3    0
 17 SALES COMM        0.0   0.0   0.0   0.0   1.00  0.0   0.0   0.0   0.0   0.0   0.0   0.0    5.100   1.000   1  409    3    0
 18 VET & MED         0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   1.00  0.0   0.0    3.500   1.000   1  416    3    0
 19 UTILITIES         0.03  0.03  0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.03  0.03  0.03   1.000   1.000   1  460    3    0

MACHINERY REQUIREMENTS                            HOURS                                         XXXXX   XXXXX POWER MACH TYPE CONT
                                                                                                              UNIT CODE
 28 PICKUP            0.15  0.15  0.15  0.15  0.10  0.0   0.0   0.0   0.0   0.15  0.15  0.15  0.0      0.0    0.    9    4    0

EQUIPMENT REQUIREMENTS                                                                         NUMBER  PROPORT XXX EQUIP TYPE XXXX
                                                                                                UNITS  OF COST      CODE
 38 LOT FENCE                                                                                 350.000   0.010   0     2    5    0
 39 WATER TANK                                                                                  1.000   0.010   0    21    5    0

LIVESTOCK INVESTMENT
 40 HORSE                                                                                       0.010   0.500   0    54    5    0


 49 LIVESTOCK LABOR   0.15  0.15  0.15  0.15  0.10  0.0   0.0   0.0   0.0   0.30  0.30  0.15

---------------------------------------------------------------------------------------------------------------------------------
                              MONTHLY SUMMARY OF RECEIPTS AND EXPENDITURES
  CATEGORY          YEAR UNIT     JAN     FEB     MAR     APR     MAY     JUN     JUL     AUG     SEP     OCT     NOV     DEC          TOTAL
TOTAL RECEIPTS         1 DOL.     0.0     0.0     0.0     0.0   490.70    0.0     0.0     0.0     0.0     0.0     0.0     0.0          490.70
TOTAL VARIABLE COST    1 DOL.     1.49    1.49    1.46    1.46    6.16    0.0     0.0     0.0     0.0   315.53    1.49    1.49         330.99
---------------------------------------------------------------------------------------------------------------------------------
ANNUAL CAPITAL         1 DOL.    26.67   26.79   26.91   27.04    0.0     0.0     0.0     0.0     0.0    26.29   26.42   26.54         186.67
---------------------------------------------------------------------------------------------------------------------------------
                              LABOR REQUIREMENTS
MACHINERY LABOR        1 HOUR     0.18    0.18    0.18    0.18    0.12    0.0     0.0     0.0     0.0     0.18    0.18    0.18           1.39
LIVESTOCK LABOR        1 HOUR     0.15    0.15    0.15    0.15    0.10    0.0     0.0     0.0     0.0     0.30    0.30    0.15           1.45
EQUIPMENT LABOR        1 HOUR     0.14    0.14    0.14    0.14    0.14    0.0     0.0     0.0     0.0     0.14    0.14    0.14           1.13
   TOTAL LABOR         1 HOUR     0.47    0.47    0.47    0.47    0.36    0.0     0.0     0.0     0.0     0.62    0.62    0.47           3.97
---------------------------------------------------------------------------------------------------------------------------------
                              MACHINERY REQUIREMENTS BY MONTH
PICKUP                   HOUR     0.17    0.17    0.17    0.17    0.11    0.0     0.0     0.0     0.0     0.17    0.17    0.17           1.28
---------------------------------------------------------------------------------------------------------------------------------
               NO             MONTHLY EQUIPMENT REQUIREMENTS AS A PROPORTION OF THE ITEMS WHOLE FARM USE
LOT FENCE      **** 1 FEET   0.0012 0.0012 0.0012 0.0012 0.0012 0.0    0.0    0.0    0.0    0.0012 0.0012 0.0012          0.0100

WATER TANK      1.0 1 GAL.   0.0012 0.0012 0.0012 0.0012 0.0012 0.0    0.0    0.0    0.0    0.0012 0.0012 0.0012          0.0100
HORSE           0.0 1 HD.    0.0625 0.0625 0.0625 0.0625 0.0625 0.0    0.0    0.0    0.0    0.0625 0.0625 0.0625          0.5000
         THE FINAL ENTRY IN EACH ROW REPRESENTS THE PROPORTION OF THE ITEMS TIME ALLOCATED TO THE BUDGET UNIT
---------------------------------------------------------------------------------------------------------------------------------
                              MACHINERY FIXED AND VARIABLE COST PER HOUR                           TOTAL
   MACHINE          CODE      DEPR      INSUR       TAX    TOTAL FIXED  REPAIR      FUEL      LUB    VARIABLE     INT       HR,TIME
PICKUP                9       1.65      0.06       0.17       1.88       0.42       4.67      0.70     5.79       1.46       1.00
---------------------------------------------------------------------------------------------------------------------------------
                              ANNUAL COST SUMMARY FOR EQUIPMENT AND LIVESTOCK
LINE                                 LIST   DEPREC-              INSUR-                             FUEL      HOURS  TOT OWN-  TOT OPER-
NO      ITEM             SIZE  UNIT  PRICE  IATION  INTEREST      ANCE      TAXES   REPAIRS AND  LUBE      LABOR  ERSHP/YR  ATING/YR
  2 LOT FENCE            1.00 FEET   25.00    2.08      1.75      0.07      0.13      0.63        0.0       0.30     2.28      0.63
 21 WATER TANK         250.00 GAL.  275.00   27.50     19.25      0.83      1.38      8.25        0.0       3.00    29.70      8.25
 54 HORSE                1.00 HD.   800.00   30.00     95.20      0.0       0.0       0.0         0.0      10.00    30.00      0.0
---------------------------------------------------------------------------------------------------------------------------------
                              ANNUAL CHARGES MADE IN THIS BUDGET FOR EQUIPMENT AND LIVESTOCK
LINE                                  NUMBER   PROPOR   OWNERSHP OPERATING INTERST LABOR HOURS
NO.     ITEM             SIZE  UNIT    ITEMS  CHARGED   CHARGES   CHARGES  CHARGES   CHARGED
  2 LOT FENCE            1.00 FEET   350.00     0.01      7.99      2.19     6.12      1.05
 21 WATER TANK         250.00 GAL.     1.00     0.01      0.30      0.08     0.19      0.03
 54 HORSE                1.00 HD       0.01     0.50      0.15      0.0      0.48      0.05
---------------------------------------------------------------------------------------------------------------------------------
          COLUMN       1      2       3        4      5       6       7        8      9      10      11      12      13       14     15    16
NAME OF MACHINE      CODE  WIDTH  INITIAL   SPEED  FIELD    RC1     RC2      RC3   HOURS  YEARS   RFV1    RFV2  PURCHASE   FUEL  HOURS  HP
                           (FEET)   LIST    (MPH)  EFFIC-                            USED  OWNED                  PRICE     TYPE   OF
                                   PRICE           ENC/                           ANNUALLY                                       LIFE
PICKUP                 9    0.8     8500    20.0   0.88   0.60  0.000831   1.60    500    8.0   0.600   0.885    8500       1    8000  140
---------------------------------------------------------------------------------------------------------------------------------
    COLUMN---      1        2      3     4       5        6        7        8       9      10      11
                                                                        SALVAGE REPAIR FUEL &  ANNUAL
                                                 LIST  PURCHASE  YEARS  PROP OF  PROP  LUB AS  HOURS
ITEM NAME        CODE    SIZE UNIT  TYPE     PRICE     PRICE   LIFE   LIST OF LIST   PROP   LABOR
LOT FENCE          2      1.00  15   2.00    25.00     25.00  12.00    0.0    0.300   0.0     0.30
WATER TANK        21    250.00   5   2.00   275.00    275.00  10.00    0.0    0.300   0.0     3.00
HORSE             54      1.00   1   1.00   800.00    800.00   8.00    0.700  0.0     0.0    10.00
---------------------------------------------------------------------------------------------------------------------------------
        100 HEAD STOCKER STEER BUDGET - BUY OCT. - SELL MAY                    HININGER     MACHINERY COMPLEMENT   11
        GRAZE-OUT WHEAT - OCT 15 TO MAR. 1 * 1.25#/DAY                                      EQUIPMENT COMPLEMENT   11
        MARCH 1 TO MAY 15 1.7#/DAY                                 05/31/83   1000000000          PRICE VECTOR   1

                          LINE CHANGE          LINE CHANGE          LINE CHANGE          LINE CHANGE          LINE CHANGE
GENERAL NAME CHANGE-> 16  STOCKER STEERS
```

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ASSIGNMENT SHEET #2

PART II — Irrigated Soybeans Enterprise — Budget #98700035

Using the back of OSU Enterprise Budget #98700035 on the following page, obtain the information indicated below.

A. What herbicide was applied? ____________________

B. When were harvested soybeans sold? ____________________

C. What horsepower tractor was used? ____________________

D. When was a chisel used to till the soil? ____________________

E. What size offset disk was used? ____________________

F. What was the price per acre paid for custom combining? ____________________

G. What price vector was used? ____________________

H. What are the fixed costs per acre for the planter? ____________________

I. How much labor is required for irrigation in July? ____________________

J. What are the total operating expenses? ____________________

ASSIGNMENT SHEET #2

```
BUDGET IDENTIFICATION NUMBER  SOYBEANS [illegible]            [illegible] 11        BUDGET RECORD NUMBER 338
                                                                                    BUDGET FILE  1

IRRIGATED SOYBEANS                                              90700033
CUSTOM COMBINE & HAUL                                           01/03/83
                                                          WESTSOUTHCENTRAL

                      1     2     3     4     5     6     7     8     9    10    11    12     13     14    15   16   17   18
                     JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC   PRICE WEIGHT UNIT ITEM TYPE CONT
LINE                                                                                                     CODE CODE
PRODUCTION                                 NUMBER OF UNITS
  1 SOYBEANS         0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0 35.00   0.0  -1.000   0.0   3.  95.  2.   0.

OPERATING INPUTS                              RATE/UNIT                                  PRICE NUMBER UNIT ITEM TYPE CONT
                                                                                          UNITS CODE CODE
 11 SOYBEAN SEED     0.0   0.0   0.0   0.0   0.0 60.00   0.0   0.0   0.0   0.0   0.0   0.0  -1.000   0.0  12. 190.  3.   0.
 12 NITROGEN (N)     0.0   0.0   0.0   0.0   0.0 20.00   0.0   0.0   0.0   0.0   0.0   0.0  -1.000   0.0  12. 211.  3.   0.
 13 PHOSPH (P2O5)    0.0   0.0   0.0   0.0   0.0 40.00   0.0   0.0   0.0   0.0   0.0   0.0  -1.000   0.0  12. 214.  3.   0.
 14 POTASH (K2O)     0.0   0.0   0.0   0.0   0.0 20.00   0.0   0.0   0.0   0.0   0.0   0.0  -1.000   0.0  12. 216.  3.   0.
 15 HERBICIDE        0.0   0.0   0.0   0.0   0.0  1.00   0.0   0.0   0.0   0.0   0.0   0.0  12.000   0.0   7. 235.  3.   0.
 16 CUSTOM COMBINE   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  1.00   0.0  16.000   0.0   7. 305.  3.   0.
 17 CUSTOM HAULING   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0 35.00   0.0   0.130   0.0   2. 360.  3.   0.
 18 MISCL EXPENSE    0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0 10.00   0.0   0.130   0.0   2. 400.  3.   0.

MACHINERY REQUIREMENTS                        TIMES OVER                                 XXXXX  XXXXX POWER MACH TYPE CONT
                                                                                                      UNIT CODE
 38 CHISEL           0.0   0.0  1.00   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0    0.0   3.  42.  4.   0.
 39 OFFSET DISK      0.0   0.0  1.00  1.00   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0    0.0   3.  37.  4.   0.
 40 SPRINGTOOTH      0.0   0.0   0.0   0.0   0.0  1.00   0.0   0.0   0.0   0.0   0.0   0.0   0.0    0.0   3.  54.  4.   0.
 41 PLANTER          0.0   0.0   0.0   0.0   0.0  1.00   0.0   0.0   0.0   0.0   0.0   0.0   0.0    0.0   3.  65.  4.   0.
 42 ROW CULTIVATOR   0.0   0.0   0.0   0.0   0.0  1.00  1.00   0.0   0.0   0.0   0.0   0.0   0.0    0.0   3.  63.  4.   0.
 43 PICKUP           0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  0.20   0.0   0.0   0.0    0.0   0.  11.  4.   0.


 49 ACIN IRRIG WATER 0.0   0.0   0.0   0.0   0.0   0.0  9.00  9.00  6.00   0.0   0.0   0.0

-----------------------------------------------------------------------------------------------------------------------------
                              MONTHLY SUMMARY OF RECEIPTS AND EXPENSES
      CATEGORY       UNIT    JAN    FEB    MAR    APR    MAY    JUN    JUL    AUG    SEP    OCT    NOV    DEC       TOTAL
TOTAL RECEIPTS       ACRE    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0 182.00    0.0      182.00
TOTAL EXPENSES       ACRE    0.0    0.0   3.97   2.01    0.0  49.57  19.04  17.19  11.46   1.21  22.75    0.0      128.00
RETURNS TO LAND, LABOR, CAPITAL, MACHINERY, OVERHEAD, RISK, AND MANAGEMENT                                            54.00
-----------------------------------------------------------------------------------------------------------------------------
ANNUAL CAPITAL       DOL.    0.0    0.0   0.33   0.30   3.90   4.63   6.28   7.72   8.67   8.77    0.0    0.0       37.40
-----------------------------------------------------------------------------------------------------------------------------
                             LABOR REQUIREMENTS BY MONTH
MACHINERY LABOR      HR.     0.0    0.0   0.43   0.21    0.0   0.63   0.29    0.0    0.0   0.24    0.0    0.0        1.81
IRRIGATION LABOR     HR.     0.0    0.0    0.0    0.0    0.0    0.0   1.11   1.11   0.74    0.0    0.0    0.0        2.95
TOTAL LABOR          HR.     0.0    0.0   0.43   0.21    0.0   0.63   1.40   1.11   0.74   0.24    0.0    0.0        4.76
-----------------------------------------------------------------------------------------------------------------------------
IRRIGATION WATER     INCH    0.0    0.0    0.0    0.0    0.0    0.0   9.00   9.00   6.00    0.0    0.0    0.0       24.00
-----------------------------------------------------------------------------------------------------------------------------
                              MACHINERY FIXED AND VARIABLE COSTS PER HOUR
                                                                                     TOTAL
   MACHINE           CODE     DEPR     INSUR.     TAX   TOTAL FIXED  REPAIR     FUEL     LUB.   VARIABLE    INT.     HR/TIME
TRACTOR(3)             3      4.66      0.25      0.63     5.54       2.61      6.07     0.91     9.59      6.97      1.00
PICKUP                11      2.10      0.08      0.22     2.40       1.73      3.78     0.57     6.07      2.31      1.00
CHISEL                42      1.69      0.07      0.20     1.96       0.38      0.0      0.0      0.38      2.03      0.18
OFFSET DISK           37      4.77      0.20      0.58     5.55       1.08      0.0      0.0      1.08      5.80      0.17
SPRINGTOOTH           54      1.41      0.06      0.17     1.64       0.88      0.0      0.0      0.88      1.71      0.09
PLANTER               65      7.55      0.32      0.92     8.79       2.42      0.0      0.0      2.42      9.17      0.21
ROW CULTIVATOR        63      1.65      0.07      0.20     1.92       0.57      0.0      0.0      0.57      2.00      0.24
-----------------------------------------------------------------------------------------------------------------------------
                      ITEM         TIMES LABOR  MACHINE FUEL,OIL,LUB.,  FIXED COSTS
  OPERATION           NO.    DATE  OVER  HOURS  HOURS   REPAIR PER ACRE  PER ACRE
-----------------------------------------------------------------------------------------------------------------------------
CHISEL               3,42    MAR   1.00  0.217  0.180        1.86          3.16
OFFSET DISK          3,37    MAR   1.00  0.209  0.173        2.01          4.30
OFFSET DISK          3,37    APR   1.00  0.209  0.173        2.01          4.30
SPRINGTOOTH          3,54    JUN   1.00  0.112  0.093        1.06          1.37
PLANTER              3,65    JUN   1.00  0.248  0.209        2.64          6.67
ROW CULTIVATOR       3,63    JUN   1.00  0.288  0.238        2.63          4.16
ROW CULTIVATOR       3,63    JUL   1.00  0.288  0.238        2.63          4.16
PICKUP                 11    OCT   0.20  0.240  0.200        1.21          0.24
   TOTAL                                 1.812  1.499       16.21         27.04
-----------------------------------------------------------------------------------------------------------------------------
        COLUMN        1      2       3       4      5      6       7        8      9     10      11     12       13     14     15    16
NAME OF MACHINE     CODE   WIDTH  INITIAL  SPEED  FIELD   RC1     RC2      RC3   HOURS  YEARS   RPV1   RPV2  PURCHASE  FUEL  HOURS   HP
                          (FEET)   LIST    (MPH)  EFFIC-                         USED  OWNED                   PRICE   TYPE    OF
                                   PRICE          IENCY                        ANNUALLY                                        LIFE
TRACTOR(3)           3.   110.0   39000.    4.5   0.18   1.25  0.000431   1.60   600.   10.0  0.680  0.920   30000.    3.  12000. 110.
PICKUP              11.     0.5   11500.   20.0   0.88   0.60  0.001383   1.40   500.    8.0  0.600  0.885   11300.    1.   4000. 130.
OFFSET DISK         37.    12.0    5800.    4.6   0.83   0.65  0.000251   1.80   100.   10.0  0.600  0.885    5800.    0.   3000.   0.
CHISEL              42.    14.0    2050.    4.1   0.80   0.65  0.000251   1.80   100.   10.0  0.600  0.885    2050.    0.   2000.   0.
ROW CULTIVATOR      63.    12.0    2000.    3.8   0.76   1.00  0.000251   1.80   100.   10.0  0.600  0.885    2000.    0.   2000.   0.
SPRINGTOOTH         54.    24.0    3030.    5.3   0.70   0.65  0.000251   1.80   175.   10.0  0.600  0.885    3300.    0.   2000.   0.
PLANTER             65.    12.0    5500.    5.0   0.67   0.80  0.000631   1.60    60.   10.0  0.600  0.885    5500.    0.   1200.   0.
-----------------------------------------------------------------------------------------------------------------------------
            N,P&K AMOUNTS ARE ACTUAL POUNDS OF MATERIAL. MISCL. EXPENSES IS         HOTSON     MACHINERY COMPLEMENT   7
            HARVEST CHARGE FOR YIELD OVER 25 BU. CUSTOM HERBICIDE                               EQUIPMENT COMPLEMENT   7
            APPLICATION HERBICIDE IS TREFLAN AT 1 1/2 PINT RATE     11/24/82      000000001000          PRICE VECTOR   7

***NO NAME CHANGES HAVE BEEN STORED WITH THIS BUDGET***

                       EN CL    VALUE     DN CL    VALUE    CN CL    VALUE    EN CL   VALUE    DN CL    VALUE    EN CL    VALUE
IRRIGATION------->             5.000     2.020    1.350    3.890    0.050    3.690   0.300    1.170    0.190    1.910
```

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ENTERPRISE BUDGETS
UNIT VI

ASSIGNMENT SHEET #3 — MODIFY FRONT OF OSU ENTERPRISE BUDGET

NAME ______________________________ SCORE ______________

An Oklahoma State University Enterprise Budget is designed to estimate a situation that groups of producers will be facing. Individuals may modify any budget to fit their specific operation.

Using the following information, modify the front of an OSU enterprise budget. Write your answers in the *Your Value* column on the budget.

Assume that you farm in west south central Oklahoma, that you have the opportunity to rent additional farm land for $25 per acre, and that you are restricted to raising wheat. You have acquired a copy of the OSU Enterprise Budget #76700804 for wheat. You review the budget, and want to modify some of the basic assumptions used. Based on your managerial ability and your knowledge of the subject property, you think that you can reasonably expect an average yield of 30 bushels per acre. You also think that the level of fertilizer can be cut by one-fourth. You estimate that custom combining charges will be $14 per acre, custom hauling charges will be $0.14 per bushel, and miscellaneous charges will be $0.14 per bushel on yield over 20 bushels. Interest on your annual operating capital will be 16 percent. You assume that the fixed costs stated in the budget are appropriate for your situation.

ASSIGNMENT SHEET #3

```
WHEAT - LOAM SOILS                                                   76700804
CUSTOM COMBINE & HAULING                                             06/01/83
                                                             WESTSOUTHCENTRAL
    ---------------------------------------------------------------------------
    OPERATING INPUTS:             UNITS     PRICE  QUANTITY     VALUE YOUR VALUE


      WHEAT SEED                  BU.       4.750     1.250      5.94 ________
      NITROGEN (N)                LBS.      0.220    90.000     19.80 ________
      PHOSPH (P205)               LBS.      0.180    20.000      3.60 ________
      POTASH (K20)                LBS.      0.180    20.000      3.60 ________
      SPRAYER                     ACRE      3.750     1.000      3.75 ________
      CUSTOM COMBINE              ACRE     16.000     1.000     16.00 ________
      CUSTOM HAULING              BU.       0.150    32.000      4.80 ________
      MISCL EXPENSE               BU.       0.150    12.000      1.80 ________
      ANNUAL OPERATING CAPITAL    DOL.      0.130    27.887      3.63 ________
      LABOR CHARGES               HR.       4.250     1.549      6.58 ________
      MACHINERY FUEL,LUBE,REPAIRS ACRE                          11.85 ________

    TOTAL OPERATING COST                                        81.35 ________
    ---------------------------------------------------------------------------
    FIXED COSTS                             VALUE YOUR VALUE


      MACHINERY
        INTEREST AT 13.0%         DOL.      8.870 ________
        DEPR.,TAXES,INSUR.        DOL.      9.887 ________
      LAND
        INTEREST AT  0.0%         DOL.      0.0   ________
        TAXES                     DOL.      0.0   ________

    TOTAL FIXED COSTS                      18.76  ________
    ---------------------------------------------------------------------------
    PRODUCTION:                   UNITS     PRICE  QUANTITY     VALUE YOUR VALUE


      WHEAT                       BU.       3.700    32.000    118.40 ________
      S.G. PASTURE                AUMS      0.0       1.300      0.0  ________


    TOTAL RECEIPTS                                             118.40 ________
    ---------------------------------------------------------------------------
    RETURNS ABOVE TOTAL OPERATING COSTS                         37.05 ________

    RETURNS ABOVE ALL COSTS EXCEPT
        OVERHEAD,RISK AND MANAGEMENT                            18.29 ________
    ---------------------------------------------------------------------------
N, P & K AMOUNTS ARE IN POUNDS OF ACTUAL MATERIAL.                     HUTSON
MISC. EXPENSE IS LOWEST CHARGE FOR YIELD OVER 20 BU.
CUSTOM SPRAY INCLUDES CHEMICAL.  TREADWELL          05/31/83       0000001000

      PROCESSED BY DEPT. OF AGRI. ECON. - OKLAHOMA STATE UNIVERSITY
   PROGRAM DEVELOPED BY DEPT. OF AGRI. ECON. OKLAHOMA STATE UNIVERSITY


RETURNS ABOVE TOTAL OPERATING COSTS
WHEN THE QUANTITY OF WHEAT              RANGES FROM  26.00 TO 38.00
 AND THE PRICE OF    WHEAT              RANGES FROM   3.20 TO  4.20

                        QUANTITY OF WHEAT

                         26.00      29.00      32.00      35.00      38.00

                   ***************************************************
                3.20 *    2.75      11.90      21.05      30.20      39.35
                     *
                3.45 *    9.25      19.15      29.05      38.95      48.85
PRICE OF             *
WHEAT           3.70 *   15.75      26.40      37.05      47.70      58.35
                     *
                3.95 *   22.25      33.65      45.05      56.45      67.85
                     *
                4.20 *   28.75      40.90      53.05      65.20      77.35
                     *
          RETURNS NOT ADJUSTED FOR EFFECT OF YIELD CHANGES ON COSTS
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ENTERPRISE BUDGETS
UNIT VI

ASSIGNMENT SHEET #4 — MODIFY BACK OF OSU ENTERPRISE BUDGET

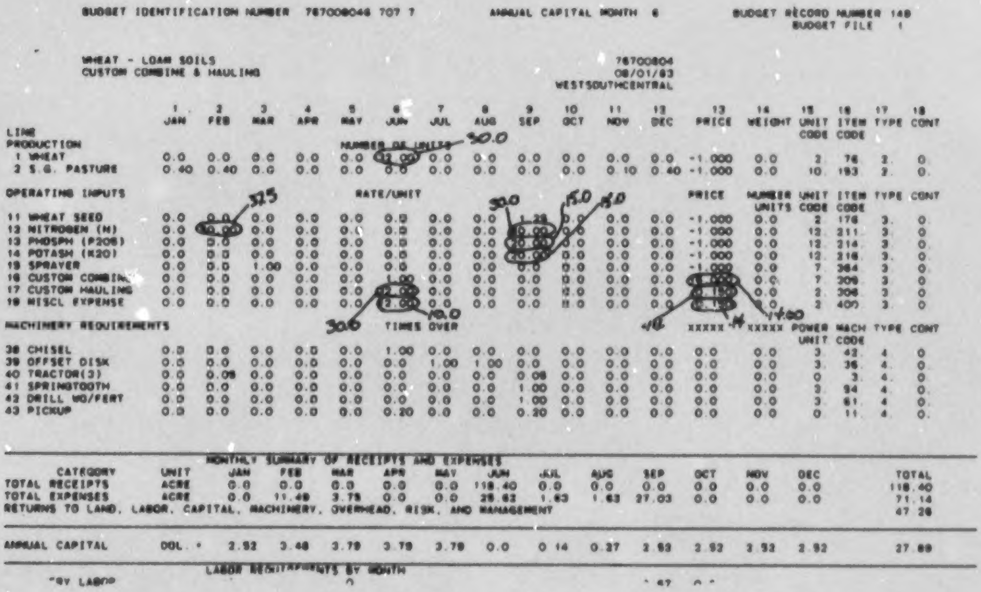
NAME ______________________________ SCORE ______________

The back of an OSU Enterprise Budget is designed for use in developing budget information to submit to a computer to generate a new budget. The back is also useful in developing computer-generated cash flow projections.

Information on the back of the budget allows for timing of cash inflows and cash outflows, timing of machinery requirements, determination of labor requirements by month, and a machinery complement.

Modifications may be made by circling the information to be changed and indicating the new information as shown in the example below.

EXAMPLE:



```
        BUDGET IDENTIFICATION NUMBER  767008046 707 7        ANNUAL CAPITAL MONTH  6        BUDGET RECORD NUMBER 148
                                                                                                  BUDGET FILE    1

        WHEAT - LOAM SOILS                                               76700804
        CUSTOM COMBINE & HAULING                                         08/01/83
                                                                 WESTSOUTHCENTRAL

                       1     2     3     4     5     6     7     8     9     10    11    12     13     14     15   16   17   18
                      JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC   PRICE  WEIGHT UNIT ITEM TYPE CONT
LINE                                                                                                        CODE CODE
PRODUCTION                                   NUMBER OF UNITS   30.0
  1 WHEAT             0.0   0.0   0.0   0.0   0.0 [illegible] 0.0 0.0   0.0   0.0   0.0   0.0  -1.000   0.0     2.   76.  2.   0.
  2 S.G. PASTURE      0.40  0.40  0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.10  0.40 -1.000   0.0    10.  193.  2.   0.

OPERATING INPUTS              325            RATE/UNIT             30.0  15.0 15.0     PRICE  NUMBER UNIT ITEM TYPE CONT
                                                                                              UNITS  CODE CODE
 11 WHEAT SEED        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   1.25  0.0   0.0   0.0  -1.000   0.0     2   176   3.   0.
 12 NITROGEN (N)      0.0 [illegible] 0.0 0.0   0.0   0.0   0.0   0.0 [illegible] 0.0 0.0  0.0  -1.000   0.0    12.  211.  3.   0.
 13 PHOSPH (P205)     0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0 [illegible] 0.0 0.0   0.0  -1.000   0.0    12.  214.  3.   0.
 14 POTASH (K20)      0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0 [illegible] 0.0 0.0   0.0  -1.000   0.0    12.  216.  3.   0.
 15 SPRAYER           0.0   0.0   1.00  0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  -1.000   0.0     7.  364   3    0.
 16 CUSTOM COMBINE    0.0   0.0   0.0   0.0   0.0   1.00  0.0   0.0   0.0   0.0   0.0   0.0 [illegible] 0.0   7.  309.  3    0
 17 CUSTOM HAULING    0.0   0.0   0.0   0.0   0.0 [illegible] 0.0 0.0   0.0   0.0   0.0   0.0 [illegible] 0.0   2.  308.  3    0
 18 MISCL EXPENSE     0.0   0.0   0.0   0.0   0.0 [illegible] 0.0 0.0   0.0   0.0   0.0   0.0 [illegible] 0.0   2   400.  3.   0
                                                   10.0                                       14.00
MACHINERY REQUIREMENTS                  30.0  TIMES OVER                           XXXXX      XXXXX  POWER MACH TYPE CONT
                                                                                                     UNIT  CODE
 38 CHISEL            0.0   0.0   0.0   0.0   0.0   1.00  0.0   0.0   0.0   0.0   0.0   0.0   0.0     0.0     3.   42.  4    0
 39 OFFSET DISK       0.0   0.0   0.0   0.0   0.0   0.0   1.00  1.00  0.0   0.0   0.0   0.0   0.0     0.0     3.   36.  4.   0.
 40 TRACTOR(3)        0.0   0.08  0.0   0.0   0.0   0.0   0.0   0.0   0.08  0.0   0.0   0.0   0.0     0.0     0     3.  4.   0.
 41 SPRINGTOOTH       0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   1.00  0.0   0.0   0.0   0.0     0.0     3.   94   4.   0.
 42 DRILL WO/FERT     0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   1.00  0.0   0.0   0.0   0.0     0.0     3.   61.  4    0.
 43 PICKUP            0.0   0.0   0.0   0.0   0.0   0.20  0.0   0.0   0.20  0.0   0.0   0.0   0.0     0.0     0    11.  4.   0.

                              MONTHLY SUMMARY OF RECEIPTS AND EXPENSES
    CATEGORY        UNIT    JAN    FEB    MAR    APR    MAY    JUN    JUL    AUG    SEP    OCT    NOV    DEC          TOTAL
TOTAL RECEIPTS      ACRE    0.0    0.0    0.0    0.0    0.0  118.40   0.0    0.0    0.0    0.0    0.0    0.0         118.40
TOTAL EXPENSES      ACRE    0.0   11.48   3.75   0.0    0.0   25.62   1.63   1.63  27.03   0.0    0.0    0.0          71.14
RETURNS TO LAND, LABOR, CAPITAL, MACHINERY, OVERHEAD, RISK, AND MANAGEMENT                                           47.26

ANNUAL CAPITAL      DOL. *  2.52   3.48   3.79   3.79   3.79   0.0    0.14   0.27   2.53   2.52   2.52   2.52         27.89

                              LABOR REQUIREMENTS BY MONTH
```

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(NOTE: Default value [-1.000] refers to prices in price vector that are updated periodically. Consult with instructor for more information on unit codes, item codes, and type.)

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ASSIGNMENT SHEET #4

Using the following information, modify the back of an OSU Enterprise Budget. Circle the changes to be made and indicate new data to be used.

Assume that you farm in east central Oklahoma, and that you are considering expanding your cow herd an additional 25 cow units. You have acquired a copy of OSU Enterprise Budget #11501518 Cow/Calf Cost and Returns. You have reviewed the budget and determined that you want to modify the budget and send it to OSU for a new computer-generated budget. Based on your managerial abilities, you want to make the following changes to the back of the budget.

> Instead of using default values (-1.000) for production prices, you want to use $73/cwt for steer calves, $65/cwt for heifer calves, $45/cwt for commercial cows, and $48/cwt for aged bull. Also, you plan to sell all your cull commercial cows in February.
>
> You plan to purchase all your prairie hay needs (0.213 tons/cow unit) during the month of August. Hauling and marketing expenses will occur in February (0.25), June (0.50), and October (0.25). No replacement herd bulls will be purchased.

ASSIGNMENT SHEET #4

```
          BUDGET IDENTIFICATION NUMBER  115015184150815          ANNUAL CAPITAL MONTH  6          BUDGET RECORD NUMBER 125
                                                                                                        BUDGET FILE   1
          COW CALF COST & RETURNS / PER COW. 100 COW UNIT                              11501518
          FALL CALVING / COOL SEASON PASTURE                                           08/01/83
                                                                                     EASTCENTRAL

                           1     2     3     4     5     6     7     8     9    10    11    12      13      14    15   16   17   18
                          JAN   FEB   MAR   APR   MAY   JUN   JUL   AUG   SEP   OCT   NOV   DEC    PRICE  WEIGHT UNIT ITEM TYPE CONT
LINE                                                                                                              CODE CODE
PRODUCTION                                      NUMBER OF UNITS
  1 STR CALV(3-5) CW      0.0   0.0   0.0   0.0   0.0   0.45  0.0   0.0   0.0   0.0   0.0   0.0  -1.000   4.600  16   13    2    0
  2 HFR CALV(3-5) CW      0.0   0.0   0.0   0.0   0.0   0.33  0.0   0.0   0.0   0.0   0.0   0.0  -1.000   4.300  16   12    2    0
  3 COWS-COMMERCIAL       0.0   0.02  0.0   0.0   0.0   0.04  0.0   0.04  0.0   0.0   0.0   0.0  -1.000   9.500  16   18    2    0
  4 AGED BULL             0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.01  0.0   0.0   0.0  -1.000  16.000  16   17    2    0

OPERATING INPUTS                               RATE/UNIT                                          PRICE   NUMBER UNIT ITEM TYPE CONT
                                                                                                           UNITS CODE CODE
 13 PRAIRIE HAY           0.08  0.07  0.04  0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0  -1.000   1.120   3   85    3    0
 14 PASTURE               0.78  0.78  1.01  1.12  1.12  1.12  1.12  1.12  1.12  1.12  1.12  1.12 -1.000   1.120  10  150    3    0
 15 SALT & MIN.          10.00  0.0   0.0   4.00  0.0   0.0  10.00  0.0   0.0   0.0   0.0   0.0  -1.000   1.120  12  103    3    0
 16 VET & MED             0.0   0.25  0.0   0.0   0.0   0.0   0.50  0.0   0.0   0.0   0.25  0.0   5.000   1.000  15  416    3    0
 17 HAULING & MKTG.       0.0   0.25  0.0   0.0   0.0   0.0   0.50  0.0   0.0   0.25  0.0   0.0  10.000   1.000   1  485    3    0
 18 PERSONAL TAXES        0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   0.0   1.00  2.000   1.030   1  442    3    0
 19 LVSTOCK SUPPLIES      0.0   0.0   0.25  0.0   0.0   0.25  0.0   0.0   0.25  0.0   0.0   0.25  3.250   1.000   1  417    3    0
 20 BULLS, HERD           0.0   0.0   0.0   0.0   0.01  0.0   0.0   0.0   0.0   0.0   0.0   0.0  -1.000   8.000   1   14    3    0

MACHINERY REQUIREMENTS                           HOURS                                            XXXXX   XXXXX POWER MACH TYPE CONT
                                                                                                               UNIT CODE
 26 PICKUP                0.20  0.25  0.25  0.20  0.15  0.30  0.15  0.20  0.30  0.30  0.20  0.20  0.0     0.0    0   11    4    0
 27 TRAILER               0.0   0.10  0.0   0.10  0.0   0.20  0.0   0.10  0.20  0.20  0.0   0.0   0.0     0.0   11   99    4    0

EQUIPMENT REQUIREMENTS                                                                           NUMBER  PROPORT XXX EQUIP TYPE XXXX
                                                                                                  UNITS  OF COST      CODE
 38 4-WIRE FENCE                                                                                  5.000   0.010   0     1    5    0
 39 LOT FENCE                                                                                     5.600   0.020   0     2    5    0
 44 MISC  EQUIP                                                                                   1.000   0.800   0    24    5    0

LIVESTOCK INVESTMENT
 40 BEEF COW                                                                                      1.000   1.000   0    51    5    0
 41 BEEF BULL                                                                                     0.030   1.000   0    53    5    0
 42 BEEF HEIFER                                                                                   0.120   1.000   0    52    5    0
 43 HORSE                                                                                         0.010   0.800   0    54    5    0
..................................................................................................................................
                                        MONTHLY SUMMARY OF RECEIPTS AND EXPENDITURES
  CATEGORY            YEAR UNIT     JAN     FEB     MAR     APR     MAY     JUN     JUL     AUG     SEP     OCT     NOV     DEC           TOTAL
TOTAL RECEIPTS          1 DOL       0.0     8.35    0.0     0.0     0.0   260.44    0.0    17.10    7.88    0.0     0.0     0.0          293.77
TOTAL VARIABLE COST     1 DOL       8.51    5.65    4.48    2.52    7.46    4.18    9.88    3.07    4.18    5.88    2.61    4.23          63.49
..................................................................................................................................
ANNUAL CAPITAL          1 DOL       1.80    1.69    2.07    2.28    2.90    0.0     0.61    0.0     0.0     0.48    0.71    1.08          13.61
..................................................................................................................................
                                    LABOR REQUIREMENTS
MACHINERY LABOR         1 HOUR      0.24    0.42    0.30    0.36    0.18    0.60    0.18    0.36    0.60    0.60    0.24    0.24           4.32
EQUIPMENT LABOR         1 HOUR      0.31    0.31    0.31    0.31    0.31    0.31    0.31    0.31    0.31    0.31    0.31    0.31           3.72
   TOTAL LABOR          1 HOUR      0.55    0.73    0.61    0.67    0.49    0.91    0.49    0.67    0.91    0.91    0.55    0.55           8.04
..................................................................................................................................

                                    MACHINERY REQUIREMENTS BY MONTH
PICKUP                       HOUR   0.30    0.35    0.25    0.30    0.15    0.50    0.15    0.30    0.50    0.50    0.20    0.20           3.60
TRAILER             ( 0.9)HOUR      0.0     0.10    0.0     0.10    0.0     0.20    0.0     0.10    0.20    0.20    0.0     0.0            0.90
..................................................................................................................................
                 NO                 MONTHLY EQUIPMENT REQUIREMENTS AS A PROPORTION OF THE ITEMS WHOLE FARM USE
4-WIRE FENCE     5.0 1 MILE    0.0008 0.0008 0.0008 0.0008 0.0008 0.0008 0.0008 0.0008 0.0008 0.0008 0.0008 0.0008                0.0100
LOT FENCE        5.6 1 FEET    0.0017 0.0017 0.0017 0.0017 0.0017 0.0017 0.0017 0.0017 0.0017 0.0017 0.0017 0.0017                0.0200
BEEF COW         1.0 1 HD.     0.0833 0.0833 0.0833 0.0833 0.0833 0.0833 0.0833 0.0833 0.0833 0.0833 0.0833 0.0833                1.0000
BEEF BULL        0.0 1 HD.     0.0833 0.0833 0.0833 0.0833 0.0833 0.0833 0.0833 0.0833 0.0833 0.0833 0.0833 0.0833                1.0000
BEEF HEIFER      0.1 1 HD.     0.0833 0.0833 0.0833 0.0833 0.0833 0.0833 0.0833 0.0833 0.0833 0.0833 0.0833 0.0833                1.0000
HORSE            0.0 1 HD.     0.0667 0.0667 0.0667 0.0667 0.0667 0.0667 0.0667 0.0667 0.0667 0.0667 0.0667 0.0667                0.8000
MISC  EQUIP      1.0 1 HD.     0.0667 0.0667 0.0667 0.0667 0.0667 0.0667 0.0667 0.0667 0.0667 0.0667 0.0667 0.0667                0.8000
          THE FINAL ENTRY IN EACH ROW REPRESENTS THE PROPORTION OF THE ITEMS TIME ALLOCATED TO THE BUDGET UNIT
..................................................................................................................................
                                   MACHINERY FIXED AND VARIABLE COST PER HOUR                       TOTAL
   MACHINE          CODE      DEPR      INSUR       TAX    TOTAL FIXED  REPAIR      FUEL      LUB    VARIABLE     INT       HR/TIME
PICKUP               11       2.32      0.08       0.24       2.65       1.80       3.59      0.54      5.93      2.21       1.00
TRAILER              99       4.74      0.22       0.60       5.56       1.22       0.0       0.0       1.22      5.44       1.00
..................................................................................................................................
                                   ANNUAL COST SUMMARY FOR EQUIPMENT AND LIVESTOCK
LINE                                   LIST    DEPREC-            INSUR-                         FUEL      HOURS TOT OWN- TOT OPER-
NO        ITEM          SIZE  UNIT     PRICE   IATION  INTEREST    ANCE     TAXES   REPAIRS AND LUBE     LABOR ERSHP/YR ATING/YR
  1 4-WIRE FENCE        1.00 MILE    3000.00   150.00   225.00     9.00     15.00     37.50     0.0       2.00   174.00    37.50
  2 LOT FENCE           1.00 FEET      35.00     1.75     2.62     0.10      0.18      0.44     0.0       0.30     2.03     0.44
 51 BEEF COW            1.00 HD       900.00     5.00    72.00     0.0       0.0       0.0      0.0       2.26     5.00     0.0
 53 BEEF BULL           1.00 HD      1000.00    40.00   135.00     0.0       0.0       0.0      0.0       2.26     5.00     0.0
 52 BEEF HEIFER         1.00 HD       430.00     0.0     64.50     0.0       0.0       0.0      0.0       3.00    40.00     0.0
 54 HORSE               1.00 HD       800.00    48.00   102.00     0.0       0.0       0.0      0.0       3.00     0.0      0.0
 24 MISC  EQUIP       100.00 HD        20.00     2.00     1.50     0.06      0.10      0.20     0.0      10.00    48.00     0.0
                                                                                                         1.00     2.16     0.20
..................................................................................................................................
                                   ANNUAL CHARGES MADE IN THIS BUDGET FOR EQUIPMENT AND LIVESTOCK
LINE                                  NUMBER   PROPOR.  OWNERSHP OPERATING INTERST LABOR HOURS
NO        ITEM          SIZE  UNIT    ITEMS   CHARGED   CHARGES   CHARGES  CHARGES  CHARGED
  1 4-WIRE FENCE        1.00 MILE      5.00     0.01      8.70      1.87    11.25     0.10
  2 LOT FENCE           1.00 FEET      5.60     0.02      0.27      0.05     0.29     0.03
 51 BEEF COW            1.00 HD        1.00     1.00      5.00      0.0     72.00     2.26
 53 BEEF BULL           1.00 HD        0.03     1.00      1.20      0.0      4.05     0.08
 52 BEEF HEIFER         1.00 HD        0.12     1.00      0.0       0.0      7.74     0.36
 54 HORSE               1.00 HD        0.01     0.80      0.38      0.0      0.82     0.08
 24 MISC  EQUIP       100.00 HD        1.00     0.80      1.73      0.16     1.20     0.80
..................................................................................................................................
        COLUMN           1      2        3        4       5      6        7        8       9      10      11      12       13      14     15    16
NAME OF MACHINE        CODE   WIDTH   INITIAL   SPEED   FIELD   RC1      RC2      RC3    HOURS   YEARS    RFV1    RFV2  PURCHASE  FUEL  HOURS   HP
                              (FEET)    LIST    (MPH)   EFFIC-                            USED   OWNED                    PRICE    TYPE    OF
                                        PRICE           ENCY                            ANNUALLY                                         LIFE
PICKUP                  11     0.5     12000     20.0   0.80   0.80  [illegible]   1.40    500     8.0   0.600   0.885    12000      1    4000   130
TRAILER                 99     3.0      3000     20.0   0.80   0.90  [illegible]   1.30     90    10.0   0.635   0.895     3000      0    1000     0
..................................................................................................................................
     COLUMN---      1       2       3      4        5         6        7        8       9      10      11
                                                                            SALVAGE  REPAIR  FUEL &  ANNUAL
                                               LIST   PURCHASE   YEARS   PROP OF   PROP   LUB AS  HOURS
ITEM NAME          CODE    SIZE  UNIT  TYPE    PRICE     PRICE     LIFE    LIST OF LIST   PROP    LABOR
4-WIRE FENCE         1     1.00   15   2.00  3000.00   3000.00    20.00    0.0    0.250    0.0     2.00
LOT FENCE            2     1.00   15   2.00    35.00     35.00    20.00    0.0    0.250    0.0     0.30
MISC  EQUIP         24   100.00    1   1.00    20.00     20.00    10.00    0.0    0.100    0.0     1.00
BEEF COW            51     1.00    1   1.00   900.00    900.00     8.00    0.920  0.0      0.0     2.26
BEEF HEIFER         52     1.00    1   1.00   430.00    430.00     8.00    1.000  0.0      0.0     3.00
BEEF BULL           53     1.00    1   1.00  1000.00   1000.00     5.00    0.800  0.0      0.0     3.00
HORSE               54     1.00    1   1.00   800.00    800.00     5.00    0.700  0.0      0.0    10.00
..................................................................................................................................
          WELL FERTILIZED BERMUDA & FESCUE PASTURE UTILIZED                          HEMPHILL     MACHINERY COMPLEMENT  15
          ASSUMES 90% CALF CROP                                                                   EQUIPMENT COMPLEMENT  15
          HAY FED ONLY DURING DEEP SNOWS                             04/26/83      0100100000           PRICE VEC.OR    6

                        LINE CHANGE              LINE CHANGE             LINE CHANGE          LINE CHANGE          LINE CHANGE
GENERAL NAME CHANGE--> 80  GRASS HAY            417  LVSTOCK SUPPLIES

                     RW CL      VALUE       RW CL      VALUE       RW CL      VALUE       RW CL      VALUE       RW CL      VALUE       RW CL      VALUE
EQUP COMP CHGS--->93   5     800.000000   51   8     800.000000   54   7       5.000000
BUDGET 115015184150815 HAS BEEN STORED IN CASH FLOW SUMMARY FILE LOCATION NUMBER  877 FILE NUMBER    1
```

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ENTERPRISE BUDGETS
UNIT VI

ASSIGNMENT SHEET #5 — COMPUTE BREAK-EVEN ANALYSIS

NAME ______________________________ SCORE ____________

One of the reasons for using an enterprise budget is to determine the price or yield the farmer must receive to cover a particular set of costs. This price or yield is called the break-even point.

Using the information in the following OSU Enterprise Budgets, compute the break-even points for the following problems.

A. Using the stocker steer budget #13100236 —

1. What stocker steer price is needed to recover all operating costs? ____________

2. What stocker steer price is needed to recover all costs except land, overhead, risk, and management? ____________

B. Using the oats budget #74750005 —

1. What yield of oats is needed to recover all costs except land, overhead, risk, and management? ____________

2. What is the price of oats needed to recover all costs except land, overhead, risk, and management? ____________

C. Using the soybean budget #98500504 and the peanut budget #95500718 —

1. What yield is needed for soybeans to give the same returns above all costs except land, overhead, risk, and management as shown in the peanut budget? ____________

2. What yield is needed for soybeans to give the same returns above total operating costs as shown in the peanut budget? ____________

3. What price is needed for soybeans to give the same returns above all costs except land, overhead, risk, and management as shown in the peanut budget? ____________

D. Using the watermelon budget #97771107 and the cantaloupe budget #97771007 —

1. What price is needed for watermelons to give the same returns above all costs except land, overhead, risk, and management as shown on the cantaloupe budget? ____________

2. What yield is needed for cantaloupes to give the same returns above total operating costs as shown in the watermelon budget? ____________

ASSIGNMENT SHEET #5

```
100 HEAD STOCKER BUDGET, PER HEAD                                          13100236
BUY OCT 15 - SELL MAY 15:  STEERS                                          08/01/83
400# IN - 701# OUT, GRAZE-OUT - WHEAT                                     NORTHWEST

-----------------------------------------------------------------------------------
  OPERATING INPUTS:               UNITS     PRICE   QUANTITY       VALUE YOUR VALUE


     STR CALV(3-5) CH             CWT.     73.000     4.080       297.84 __________
     21-25% PRO. SUP.             LBS.      0.100   100.000        10.00 __________
     SALT & MIN.                  LBS.      0.090    19.000         1.71 __________
     TRUCKING                     HD.       2.700     1.000         2.70 __________
     SALES COMM.                  HD.       5.100     1.000         5.10 __________
     VET & MED.                   HD.       3.500     1.000         3.50 __________
     UTILITIES                    HD.       1.000     0.150         0.15 __________
     ANNUAL OPERATING CAPITAL     DOL.      0.140   186.668        26.13 __________
     MACHINERY LABOR              HR.       4.250      1.39         5.91 __________
     EQUIPMENT LABOR              HR.       4.250      1.13         4.80 __________
     LIVESTOCK LABOR              HR.       4.250      1.45         6.16 __________
     TRACTOR, FUEL AND LUBE       DOL.                              6.79 __________
     TRACTOR REPAIR COST          DOL.                              0.53 __________
     EQUIPMENT COST               DOL.                              2.27 __________

  TOTAL OPERATING COST                                            373.61 __________
-----------------------------------------------------------------------------------
  FIXED COSTS                               AMOUNT          VALUE        YOUR VALUE
    MACHINERY
      INTEREST AT 14.00%                     13.18           1.85
      DEPR., TAXES, INSUR.                                   2.38        __________
    EQUIPMENT                                                            __________
      INTEREST AT 14.00%                     45.12           6.32
      DEPR., TAXES, INSUR.                                   8.29        __________
    LIVESTOCK                                                            __________
       HORSE                          3.40
      INTEREST AT 14.00%                      3.40           0.48   __________
      DEPR., TAXES, INSUR.                                   0.15        __________
    LAND                                                                 __________
      S.G. PASTURE          4.06 AUMS                        0.0
      INTEREST AT  0.0%                                      0.0         __________
      TAXES                                                  0.0         __________
                                                                         __________
  TOTAL FIXED COST                                                 19.45 __________
-----------------------------------------------------------------------------------
  PRODUCTION:                     UNITS     PRICE   QUANTITY       VALUE YOUR VALUE


     STOCKER STEERS               CWT.     70.000     7.010       490.70 __________
-----------------------------------------------------------------------------------
   RETURNS ABOVE TOTAL OPERATING COSTS                            117.09 __________

   RETURNS ABOVE ALL COSTS EXCEPT
       OVERHEAD, RISK AND MANAGEMENT                               97.64 __________
-----------------------------------------------------------------------------------
100 HEAD STOCKER STEER BUDGET - BUY OCT. - SELL MAY                       HININGER
GRAZE-OUT WHEAT - OCT 15 TO MAR. 1 = 1.25#/DAY
MARCH 1 TO MAY 15 1.7#/DAY                                08/31/83      1000000000

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RETURNS ABOVE TOTAL OPERATING COSTS
WHEN THE QUANTITY OF STOCKER STEERS   RANGES FROM   6.51 TO  7.51
 AND THE PRICE OF    STOCKER STEERS   RANGES FROM  64.00 TO 76.00
                      QUANTITY OF STOCKER STEERS

                           6.51      6.76      7.01      7.26      7.51

                   ****************************************************
                64.00 *   43.03     59.03     75.03     91.03    107.03
                      *
                67.00 *   62.56     79.31     96.06    112.81    129.56
PRICE OF              *
STOCKER STEERS  70.00 *   82.09     99.59    117.09    134.59    152.09
                      *
                73.00 *  101.62    119.87    138.12    156.37    174.62
                      *
                76.00 *  121.15    140.15    159.15    178.15    197.15
                      *
      RETURNS NOT ADJUSTED FOR EFFECT OF YIELD CHANGES ON COSTS
```

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ASSIGNMENT SHEET #5

```
OATS                                                                       74750005
OWN MACHINERY                                                              08/01/83
OATS ARE SWATHED. 100# N                                           WESTSOUYHCENTRAL
       ----------------------------------------------------------------------------
       OPERATING INPUTS:                  UNITS     PRICE  QUANTITY       VALUE YOUR VALUE


          OAT SEED                        BU.       4.500     3.000       13.50 __________
          NITROGEN (N)                    LBS.      0.220   100.000       22.00 __________
          PHOSPH (P2O5)                   LBS.      0.180    40.000        7.20 __________
          POTASH (K2O)                    LBS.      0.180    20.000        3.60 __________
          ANNUAL OPERATING CAPITAL        DOL.      0.130    29.254        3.80 __________
          LABOR CHARGES                   HR.       4.250     2.521       10.71 __________
          MACHINERY FUEL,LUBE,REPAIRS     ACRE                            25.61 __________

       TOTAL OPERATING COST                                               86.43 __________
       ----------------------------------------------------------------------------
       FIXED COSTS                                 VALUE YOUR VALUE


         MACHINERY
           INTEREST AT 13.0%              DOL.    26.718 __________
           DEPR.,TAXES,INSUR.             DOL.    31.180 __________
         LAND
           INTEREST AT  0.0%              DOL.     0.0   __________
           TAXES                          DOL.     0.0   __________

       TOTAL FIXED COSTS                          57.90  __________
       ----------------------------------------------------------------------------
       PRODUCTION:                        UNITS     PRICE  QUANTITY       VALUE YOUR VALUE


         OATS                             BU.       1.900   100.000      190.00 __________
         S.G. PASTURE                     AUMS      0.0       0.600        0.0  __________


       TOTAL RECEIPTS                                                    190.00 __________
       ----------------------------------------------------------------------------
       RETURNS ABOVE TOTAL OPERATING COSTS                               103.57 __________

       RETURNS ABOVE ALL COSTS EXCEPT
           OVERHEAD,RISK AND MANAGEMENT                                   45.67 __________
       ----------------------------------------------------------------------------
N, P & K AMOUNTS ARE ACTUAL POUNDS OF MATERIAL                                   HUTSON
TREADWELL
                                                          05/31/83       0000001000

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RETURNS ABOVE TOTAL OPERATING COSTS
WHEN THE QUANTITY OF OATS                   RANGES FROM  80.00 TO120.00
 AND THE PRICE OF    OATS                   RANGES FROM   1.60 TO  2.20

                         QUANTITY OF OATS

                             80.00      90.00     100.00     110.00     120.00

                      ****************************************************
                  1.60 *     41.57      57.57      73.57      89.57     105.57
                       *
                  1.75 *     53.57      71.07      88.57     106.07     123.57
PRICE OF               *
OATS              1.90 *     65.57      84.57     103.57     122.57     141.57
                       *
                  2.05 *     77.57 [illegible].07     118.57     139.07     159.57
                       *
                  2.20 *     89.57     111.57     133.57     155.57     177.57
                       *
           RETURNS NOT ADJUSTED FOR EFFECT OF YIELD CHANGES ON COSTS
```

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ASSIGNMENT SHEET #5

SOYBEAN BUDGET
BOTTOMLAND (LOAM SOIL)
OWNED EQUIPMENT

98500504
01/03/83
EASTCENTRAL

OPERATING INPUTS:	UNITS	PRICE	QUANTITY	VALUE	YOUR VALUE
SOYBEAN SEED	LBS.	0.170	45.000	7.65	....
NITROGEN (N)	LBS.	0.330	15.000	4.95	....
PHOSPH (P205)	LBS.	0.290	30.000	8.70	....
POTASH (K20)	LBS.	0.140	15.000	2.10	....
PRE-EMERGE HERB	ACRE	7.500	1.000	7.50	....
POST-EMERGE HERB	ACRE	6.000	1.000	6.00	....
ANNUAL OPERATING CAPITAL	DOL.	0.170	20.726	3.52	....
LABOR CHARGES	HR.	4.000	2.166	8.66	....
MACHINERY FUEL, LUBE, REPAIRS	ACRE			19.91	....
TOTAL OPERATING COST				68.99	....

FIXED COSTS		VALUE	YOUR VALUE
MACHINERY			
INTEREST AT 17.0%	DOL.	30.955	....
DEPR., TAXES, INSUR.	DOL.	27.533	....
LAND			
INTEREST AT 0.0%	DOL.	0.0	....
TAXES	DOL.	0.0	....
TOTAL FIXED COSTS		58.49	....

PRODUCTION:	UNITS	PRICE	QUANTITY	VALUE	YOUR VALUE
SOYBEANS	BU.	5.200	32.000	166.40	....

RETURNS ABOVE TOTAL OPERATING COSTS	97.41	....
RETURNS ABOVE ALL COSTS EXCEPT OVERHEAD, RISK AND MANAGEMENT	38.92	....

PRE-EMERGE IS INCORPORATED WITH DISCING OPERATION.
POST-EMERGE IS USED FOR BROAD LEAF WEED CONTROL.

HEMPHILL
11/24/82
0000100000

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RETURNS ABOVE TOTAL OPERATING COSTS
WHEN THE QUANTITY OF SOYBEANS RANGES FROM 22.00 TO 42.00
AND THE PRICE OF SOYBEANS RANGES FROM 4.40 TO 6.00

QUANTITY OF SOYBEANS

PRICE OF SOYBEANS	22.00	27.00	32.00	37.00	42.00
4.40	27.81	49.81	71.81	93.81	115.81
4.80	36.61	60.61	84.61	108.61	132.61
5.20	45.41	71.41	97.41	123.41	149.41
5.60	54.21	82.21	110.21	138.21	166.21
6.00	63.01	93.01	123.01	153.01	183.01

RETURNS NOT ADJUSTED FOR EFFECT OF YIELD CHANGES ON COSTS

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ASSIGNMENT SHEET #5

PEANUTS, BOTTOMLAND
OWN MACHINERY

95500718
01/03/83
EASTCENTRAL

OPERATING INPUTS:	UNITS	PRICE	QUANTITY	VALUE	YOUR VALUE
PEANUT SEED	LBS.	0.500	75.000	37.50	
NITROGEN (N)	LBS.	0.330	20.000	6.60	
PHOSPH (P205)	LBS.	0.290	80.000	23.20	
POTASH (K20)	LBS.	0.140	60.000	8.40	
CHEMICALS	ACRE	3.000	10.000	30.000	
PRE-MERGE HERB	ACRE	5.000	1.000	5.00	
LEAF SPOT	ACRE	4.000	15.000	60.00	
ANNUAL OPERATING CAPITAL	DOL.	0.170	62.897	10.69	
LABOR CHARGES	HR.	4.000	8.411	33.64	
MACHINERY FUEL, LUBE, REPAIRS	ACRE			43.59	
TOTAL OPERATING COST				258.63	

FIXED COSTS		VALUE	YOUR VALUE
MACHINERY			
INTEREST AT 17.0%	DOL.	50.559	
DEPR., TAXES, INSUR.	DOL.	46.826	
LAND			
INTEREST AT 0.0%	DOL.	0.0	
TAXES	DOL.	0.0	
TOTAL FIXED COSTS		97.38	

PRODUCTION:	UNITS	PRICE	QUANTITY	VALUE	YOUR VALUE
PEANUTS	CWT.	23.000	20.000	460.00	
GRASS HAY	TONS	30.000	1.100	33.00	
TOTAL RECEIPTS				493.00	
RETURNS ABOVE TOTAL OPERATING COSTS				234.37	
RETURNS ABOVE ALL COSTS EXCEPT OVERHEAD, RISK AND MANAGEMENT				136.98	

HERBICIDE IS TREFLAN.
HERBICIDE APPLICATION INCLUDES DISCING OPERATION.
LEAF SPOT APPLIED BY AIR, CHEMICAL IS TERRACLOR.

HEMPHILL
11/24/82 0000100000

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ASSIGNMENT SHEET #5

WATERMELON PRODUCTION

97771107
01/03/83
WESTSOUTHCENTRAL

OPERATING INPUTS:	UNITS	PRICE	QUANTITY	VALUE	YOUR VALUE
WATERMELON SEED	LBS.	25.000	1.500	37.50	....
NITROGEN (N)	LBS.	0.330	80.000	26.40	....
PHOSPH (P205)	LBS.	0.290	30.000	8.70	....
POTASH (K20)	LBS.	0.140	50.000	7.00	....
HAND HOEING	ACRE	10.000	4.000	40.00	....
HAND HARVESTING	ACRE	20.000	4.000	80.00	....
RNTFERTSPRO/TON	ACRE	4.000	2.000	8.00	....
INSECTICIDE	ACRE	3.500	2.000	7.00	....
ANNUAL OPERATING CAPITAL QUANTITY	DOL.	0.170	43.674	7.42	....
LABOR CHARGES	HR.	4.250	2.710	11.52	....
MACHINERY FUEL, LUBE, REPAIRS	ACRE			26.62	....
TOTAL OPERATING COST				260.17	....

FIXED COSTS		VALUE	YOUR VALUE
MACHINERY			
INTEREST AT 17.0%	DOL.	23.273	....
DEPR., TAXES, INSUR.	DOL.	18.872	....
LAND			
INTEREST AT 0.0%	DOL.	0.0	....
TAXES	DOL.	0.0	....
TOTAL FIXED COSTS		42.14	....

PRODUCTION:	UNITS	PRICE	QUANTITY	VALUE	YOUR VALUE
WATERMELONS	TONS	100.000	6.000	600.00	....

	VALUE	YOUR VALUE
RETURNS ABOVE TOTAL OPERATING COSTS	339.83	....
RETURNS ABOVE ALL COSTS EXCEPT OVERHEAD, RISK AND MANAGEMENT	297.69	....

N, P & K AMOUNTS ARE ACTUAL POUNDS OF MATERIAL.
WATERMELONS ARE ROTATED ON A 4 YEAR BASIS.
MELONS ARE LOADED ON SEMI-TRUCK IN FIELD.

12/02/82

MOTES, JOBES, STEIN
0000001000

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ASSIGNMENT SHEET #5

CANTALOUPE PRODUCTION

97771007
01/03/83
WESTSOUTHCENTRAL

OPERATING INPUTS:	UNITS	PRICE	QUANTITY	VALUE	YOUR VALUE
SEED	LBS.	5.000	1.500	7.50	....
NITROGEN (N)	LBS.	0.330	80.000	26.40	....
PHOSPH (P205)	LBS.	0.290	30.000	8.70	....
POTASH (K20)	LBS.	0.140	15.000	2.10	....
HAND HOEING	ACRE	10.000	4.000	40.00	....
INSECTICIDE	ACRE	3.500	3.000	10.50	....
CHEMICALS	ACRE	7.000	3.000	21.00	....
HAND HARVESTING	ACRE	30.000	4.000	120.00	....
RENT FERT SPRDER	ACRE.	4.000	2.000	8.00	....
ANNUAL OPERATING CAPITAL	DOL.	0.170	37.724	6.41	....
LABOR CHARGES	HR.	4.250	2.710	11.52	....
MACHINERY FUEL, LUBE, REPAIRS	ACRE			26.62	....
TOTAL OPERATING COST				288.75	....

FIXED COSTS		VALUE	YOUR VALUE
MACHINERY			
INTEREST AT 17.0%	DOL.	23.273	....
DEPR., TAXES, INSUR.	DOL.	18.872	....
LAND			
INTEREST AT 0.0%	DOL.	0.0	....
TAXES	DOL.	0.0	....
TOTAL FIXED COSTS		42.14	....

PRODUCTION:	UNITS	PRICE	QUANTITY	VALUE	YOUR VALUE
CANTALOUPE	TONS	200.000	4.000	800.00	....

	VALUE	YOUR VALUE
RETURNS ABOVE TOTAL OPERATING COSTS	511.25	....
RETURNS ABOVE ALL COSTS EXCEPT OVERHEAD, RISK AND MANAGEMENT	469.10	....

N, P & K AMOUNTS ARE ACTUAL POUNDS OF MATERIAL. CANTALOUPES ARE ROTATED ON A 2 YEAR BASIS. CANTALOUPES LOADED ON TRUCK IN FIELD. SEVIN AND DIFOLALIN ARE CHEMICALS USED ON CANTALOUPES.

11/24/82

MOTES, JOBES, STEIN
0000001000

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PROGRAM DEVELOPED BY DEPT. OF AGRI. ECON. OKLAHOMA STATE UNIVERSITY

RETURNS ABOVE TOTAL OPERATING COSTS
WHEN THE QUANTITY OF CANTALOUPE RANGES FROM 3.00 TO 5.00
AND THE PRICE OF CANTALOUPE RANGES FROM 180.00 TO 220.00

QUANTITY OF CANTALOUPE

PRICE OF CANTALOUPE	3.00	3.50	4.00	4.50	5.00
180.00	251.24	341.24	431.24	521.24	611.24
190.00	281.24	376.24	471.24	566.24	661.24
200.00	311.24	411.24	511.24	611.24	711.24
210.00	341.24	446.24	551.24	656.24	761.24
220.00	371.24	481.24	591.24	701.24	811.24

RETURNS NOT ADJUSTED FOR EFFECT OF YIELD CHANGES ON COSTS

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ENTERPRISE BUDGETS
UNIT VI

ASSIGNMENT SHEET #6 — SELECT AND MODIFY OSU ENTERPRISE BUDGETS THAT REPRESENT ENTERPRISES IN THE PRESENT FARMING OPERATION

NAME ______________________________ SCORE ____________

Select from the *Oklahoma Enterprise Budget Book* enterprise budgets that represent the enterprises in your present farming situation.

(NOTE: A budget is no better than the information from which it is prepared. Use accurate figures that apply to your situation. Include all items of cost and returns that are applicable to each enterprise budget. Each enterprise budget should stand on its own. All costs and returns should relate directly to the enterprise budget.)

List below the OSU Enterprise Budgets you have selected.

Budget File Number	Budget Number	Enterprise Name

ENTERPRISE BUDGETS
UNIT VI

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1

Part I

A. $373.61

B. $19.45

C. 7.01 cwt or 701 pounds

D. 4.08 cwt or 408 pounds

E. $73/cwt

F. $117.09

G. $97.64

Part II

A. 60 pounds

B. $0.33/pound

C. $154.61

D. 1½ pint rate

E. 17.0 percent

F. <$90.21>

G. 35 bushels

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #2

Part I

A. May

B. 100 pounds/steer

C. 0.47 hours/steer

D. 0.15 hours

E. $490.70

F. $3.50

G. $1.88

Part II

A. Treflan

B. November

C. 110 horsepower

D. March

E. 12 feet

F. $16.00

G. 7

H. $6.47

I. 1.11 hours/acre

J. $128/acre

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #3

WHEAT - LOAM SOILS
CUSTOM COMBINE & HAULING

76700804
08/01/83
WESTSOUTHCENTRAL

OPERATING INPUTS:	UNITS	PRICE	QUANTITY	VALUE	YOUR VALUE
WHEAT SEED	BU.	4.750	1.250	5.94	5.94
NITROGEN (N)	LBS.	0.220	~~60.000~~ 67.5	~~13.20~~	14.85
PHOSPH (P2O5)	LBS.	0.180	~~20.000~~ 15.0	~~3.60~~	2.70
POTASH (K2O)	LBS.	0.180	~~20.000~~ 15.0	~~3.60~~	2.70
SPRAYER	ACRE	3.750	1.000	3.75	3.75
CUSTOM COMBINE	ACRE	~~16.000~~ 14.00	1.000	~~16.00~~	14.00
CUSTOM HAULING	BU.	~~0.150~~ .14	~~32.000~~ 30.00	~~4.80~~	4.20
MISCL EXPENSE	BU.	~~0.150~~ .14	~~12.000~~ 10.0	~~1.80~~	1.40
ANNUAL OPERATING CAPITAL	DOL.	~~0.130~~ .16	27.887	~~3.63~~	4.46
LABOR CHARGES	HR.	4.250	1.549	6.58	6.58
MACHINERY FUEL,LUBE,REPAIRS	ACRE			11.85	11.85
CASH RENT					25.00
TOTAL OPERATING COST				~~81.25~~	97.43

FIXED COSTS		VALUE	YOUR VALUE
MACHINERY			
INTEREST AT 13.0%	DOL.	8.870	
DEPR.,TAXES,INSUR.	DOL.	9.887	
LAND			
INTEREST AT 0.0%	DOL.	0.0	
TAXES	DOL.	0.0	
TOTAL FIXED COSTS		18.76	1976

PRODUCTION:	UNITS	PRICE	QUANTITY	VALUE	YOUR VALUE
WHEAT	BU	3.700	~~32.000~~ 30.00	~~118.40~~	111.00
S.G. PASTURE	AUMS	0.0	1.300	0.0	
TOTAL RECEIPTS				~~118.40~~	111.00
RETURNS ABOVE TOTAL OPERATING COSTS				~~37.05~~	13.57
RETURNS ABOVE ALL COSTS EXCEPT OVERHEAD,RISK AND MANAGEMENT				~~18.29~~	-5.19

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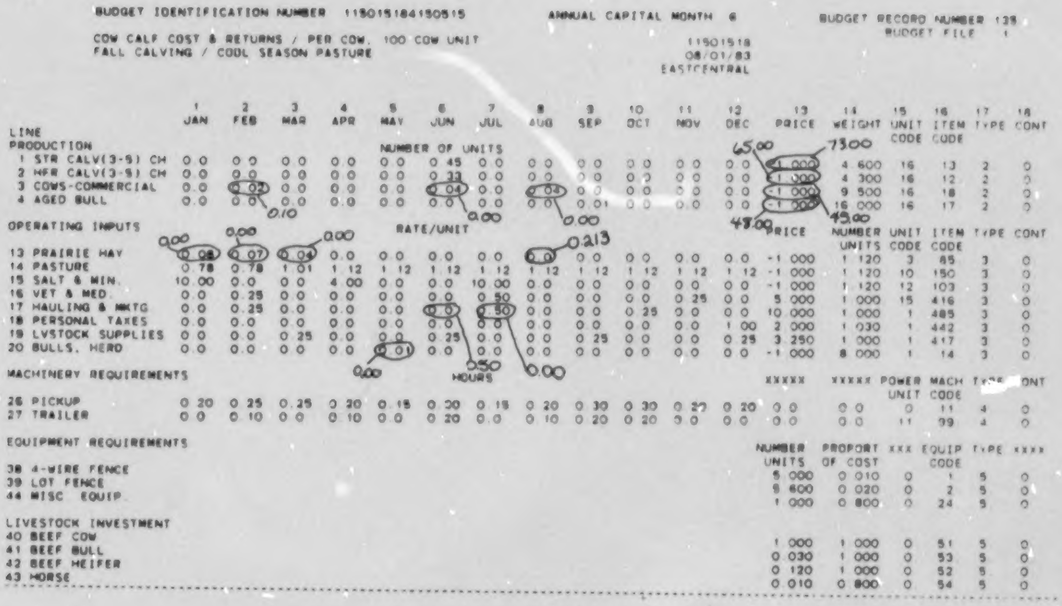
ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #4



```
BUDGET IDENTIFICATION NUMBER  115015184150515          ANNUAL CAPITAL MONTH  6          BUDGET RECORD NUMBER 135
                                                                                               BUDGET FILE    1
COW CALF COST & RETURNS / PER COW. 100 COW UNIT                            11501518
FALL CALVING / COOL SEASON PASTURE                                         08/01/83
                                                                         EASTCENTRAL

                         1      2      3      4      5      6      7      8      9     10     11     12      13      14    15    16    17   18
                        JAN    FEB    MAR    APR    MAY    JUN    JUL    AUG    SEP    OCT    NOV    DEC    PRICE  WEIGHT  UNIT  ITEM TYPE CONT
LINE                                                                                                                      CODE  CODE
PRODUCTION                                      NUMBER OF UNITS                                      65.00         73.00
  1 STR CALV(3-5) CH   0.0    0.0    0.0    0.0    0.0    0.45   0.0    0.0    0.0    0.0    0.0    0.0   -1.000   4.600   16    13    2    0
  2 HFR CALV(3-5) CH   0.0    0.0    0.0    0.0    0.0    0.33   0.0    0.0    0.0    0.0    0.0    0.0   -1.000   4.300   16    12    2    0
  3 COWS-COMMERCIAL    0.0    0.02   0.0    0.0    0.0    0.04   0.0    0.04   0.0    0.0    0.0    0.0   -1.000   9.500   16    18    2    0
  4 AGED BULL          0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.01   0.0    0.0    0.0   -1.000  16.000   16    17    2    0
                                0.10                             0.00          0.00                  48.00         45.00
OPERATING INPUTS                                RATE/UNIT                                                   PRICE  NUMBER  UNIT  ITEM TYPE CONT
                     0.00    0.00         0.00                             0.213                                    UNITS  CODE  CODE
 13 PRAIRIE HAY        0.08   0.07   0.04   0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0   -1.000   1.120    3    85    3    0
 14 PASTURE            0.78   0.78   1.01   1.12   1.12   1.12   1.12   1.12   1.12   1.12   1.12   1.12  -1.000   1.120   10   150    3    0
 15 SALT & MIN.       10.00   0.0    0.0    4.00   0.0    0.0   10.00   0.0    0.0    0.0    0.0    0.0   -1.000   1.120   12   103    3    0
 16 VET & MED.         0.0    0.25   0.0    0.0    0.0    0.0    0.50   0.0    0.0    0.0    0.25   0.0    5.000   1.000   15   416    3    0
 17 HAULING & MKTG     0.0    0.25   0.0    0.0    0.0    0.0    0.50   0.0    0.0    0.25   0.0    0.0   10.000   1.000    1   485    3    0
 18 PERSONAL TAXES     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    1.00   2.000   1.030    1   442    3    0
 19 LVSTOCK SUPPLIES   0.0    0.0    0.25   0.0    0.0    0.25   0.0    0.0    0.25   0.0    0.0    0.25   3.250   1.000    1   417    3    0
 20 BULLS, HERD        0.0    0.0    0.0    0.0    0.01   0.0    0.0    0.0    0.0    0.0    0.0    0.0   -1.000   8.000    1    14    3    0
                                              0.00          0.50   0.00
MACHINERY REQUIREMENTS                                      HOURS                                           XXXXX   XXXXX POWER  MACH TYPE CONT
                                                                                                                          UNIT  CODE
 26 PICKUP             0.20   0.25   0.25   0.20   0.15   0.30   0.15   0.20   0.30   0.30   0.20   0.20   0.0     0.0      0    11    4    0
 27 TRAILER            0.0    0.10   0.0    0.10   0.0    0.20   0.0    0.10   0.20   0.20   0.0    0.0    0.0     0.0     11    99    4    0

EQUIPMENT REQUIREMENTS                                                                              NUMBER  PROPORT  XXX  EQUIP  TYPE XXXX
                                                                                                    UNITS   OF COST        CODE
 38 4-WIRE FENCE                                                                                    5.000   0.010    0      1    5    0
 39 LOT FENCE                                                                                       5.600   0.020    0      2    5    0
 44 MISC  EQUIP                                                                                     1.000   0.800    0     24    5    0

LIVESTOCK INVESTMENT
 40 BEEF COW                                                                                        1.000   1.000    0     51    5    0
 41 BEEF BULL                                                                                       0.030   1.000    0     53    5    0
 42 BEEF HEIFER                                                                                     0.120   1.000    0     52    5    0
 43 HORSE                                                                                           0.010   0.800    0     54    5    0
------------------------------------------------------------------------------------------------------------------------------------------
```

Assignment Sheet #5 —

A. 1. Price $= \dfrac{\text{Operating Costs}}{\text{Yield}}$

$= \dfrac{\$373.61}{7.01 \text{ cwt}}$

$= \$53.30/\text{cwt}$

2. Price $= \dfrac{\text{Operating Costs} + \text{Fixed Costs}}{\text{Yield}}$

$= \dfrac{\$373.61 + \$19.45}{7.01 \text{ cwt}}$

$= \dfrac{\$393.06}{7.01 \text{ cwt}}$

$= \$56.07/\text{cwt}$

ANSWERS TO ASSIGNMENT SHEETS

B. 1.

$$
\begin{aligned}
\text{Yield} &= \frac{\text{Operating Costs} + \text{Fixed Costs}}{\text{Price}} \\
&= \frac{\$86.43 + \$57.90}{\$1.90/\text{bu}} \\
&= \frac{\$144.33}{\$1.90/\text{bu}} \\
&= 75.96 \text{ bu/acre}
\end{aligned}
$$

2.

$$
\begin{aligned}
\text{Price} &= \frac{\text{Operating Costs} + \text{Fixed Costs}}{\text{Yield}} \\
&= \frac{\$86.43 + \$57.90}{100 \text{ bu}} \\
&= \frac{\$144.33}{100 \text{ bu}} \\
&= \$1.44/\text{bu}
\end{aligned}
$$

C. 1.

$$
\begin{array}{c}\text{Returns Above All}\\ \text{Costs for Peanuts}\end{array} = \left(\begin{array}{c}\text{Price of}\\ \text{Soybeans}\end{array} \times \begin{array}{c}\text{Yield of}\\ \text{Soybeans}\end{array}\right) - \begin{array}{c}\text{Total Costs}\\ \text{of Soybeans}\end{array}
$$

$$
\begin{array}{c}\text{Price of}\\ \text{Soybeans}\end{array} \times \begin{array}{c}\text{Yield of}\\ \text{Soybeans}\end{array} = \begin{array}{c}\text{Returns Above All}\\ \text{Costs for Peanuts}\end{array} + \begin{array}{c}\text{Total Costs}\\ \text{of Soybeans}\end{array}
$$

$$
\begin{aligned}
\begin{array}{c}\text{Yield of}\\ \text{Soybeans}\end{array} &= \frac{\begin{array}{c}\text{Returns Above All}\\ \text{Costs for Peanuts}\end{array} + \begin{array}{c}\text{Total Costs}\\ \text{of Soybeans}\end{array}}{\text{Price of Soybeans}} \\
&= \frac{\$136.98 + (\$68.99 + \$58.49)}{\$5.20/\text{bu}} \\
&= \frac{\$136.98 + \$127.48}{\$5.20/\text{bu}} \\
&= \frac{\$264.46}{\$5.20/\text{bu}} \\
&= 50.86 \text{ bu/acre}
\end{aligned}
$$

ANSWERS TO ASSIGNMENT SHEETS

2.
$$\text{Returns Above Total Op. Costs for Peanuts} = \left(\text{Price of Soybeans} \times \text{Yield of Soybeans}\right) - \text{Operating Costs of Soybeans}$$

$$\text{Price of Soybeans} \times \text{Yield of Soybeans} = \text{Returns Above Total Op. Costs for Peanuts} + \text{Operating Costs of Soybeans}$$

$$\text{Yield of Soybeans} = \frac{\text{Returns Above Total Op. Costs for Peanuts} + \text{Operating Costs of Soybeans}}{\text{Price of Soybeans}}$$

$$= \frac{\$234.37 + \$68.99}{\$5.20/\text{bu}}$$

$$= \frac{\$303.36}{\$5.20/\text{bu}}$$

$$= 58.34 \text{ bu/acre}$$

3.
$$\text{Returns Above All Costs for Peanuts} = \left(\text{Price of Soybeans} \times \text{Yield of Soybeans}\right) - \text{Total Costs of Soybeans}$$

$$\text{Price of Soybeans} \times \text{Yield of Soybeans} = \text{Returns Above All Costs for Peanuts} + \text{Total Costs of Soybeans}$$

$$\text{Price of Soybeans} = \frac{\text{Returns Above All Costs for Peanuts} + \text{Total Costs of Soybeans}}{\text{Yield of Soybeans}}$$

$$= \frac{\$136.98 + (\$68.99 + \$58.49)}{32 \text{ bu/acre}}$$

$$= \frac{\$136.98 + \$127.48}{32 \text{ bu/acre}}$$

$$= \frac{\$264.46}{32 \text{ bu/acre}}$$

$$= \$8.26/\text{bu}$$

ANSWERS TO ASSIGNMENT SHEETS

D. 1.

$$\begin{matrix}\text{Returns Above All}\\ \text{Costs for Cantaloupe}\end{matrix} = \left(\begin{matrix}\text{Price of}\\ \text{Watermelons}\end{matrix} \times \begin{matrix}\text{Yield of}\\ \text{Watermelons}\end{matrix}\right) - \begin{matrix}\text{Total Costs of}\\ \text{Watermelons}\end{matrix}$$

$$\begin{matrix}\text{Price of}\\ \text{Watermelons}\end{matrix} \times \begin{matrix}\text{Yield of}\\ \text{Watermelons}\end{matrix} = \begin{matrix}\text{Returns Above Total}\\ \text{Costs for Cantaloupe}\end{matrix} + \begin{matrix}\text{Total Costs of}\\ \text{Watermelons}\end{matrix}$$

$$\begin{matrix}\text{Price of}\\ \text{Watermelons}\end{matrix} = \frac{\begin{matrix}\text{Returns Above All}\\ \text{Costs for Cantaloupe}\end{matrix} + \begin{matrix}\text{Total Costs of}\\ \text{Watermelons}\end{matrix}}{\text{Yield of Watermelons}}$$

$$= \frac{\$469.10 + (\$260.17 + \$42.14)}{6 \text{ tons}}$$

$$= \frac{\$469.10 + \$302.31}{6 \text{ tons}}$$

$$= \frac{\$771.41}{6 \text{ tons}}$$

$$= \$128.57/\text{ton}$$

2.

$$\begin{matrix}\text{Returns Above Total}\\ \text{Op. Costs for Watermelons}\end{matrix} = \left(\begin{matrix}\text{Price of}\\ \text{Cantaloupes}\end{matrix} \times \begin{matrix}\text{Yield of}\\ \text{Cantaloupes}\end{matrix}\right) - \begin{matrix}\text{Operating Costs}\\ \text{of Cantaloupes}\end{matrix}$$

$$\begin{matrix}\text{Price of}\\ \text{Cantaloupes}\end{matrix} \times \begin{matrix}\text{Yield of}\\ \text{Cantaloupes}\end{matrix} = \begin{matrix}\text{Returns Above Total}\\ \text{Op. Costs for Watermelons}\end{matrix} + \begin{matrix}\text{Operating Costs}\\ \text{of Cantaloupes}\end{matrix}$$

$$\begin{matrix}\text{Yield of}\\ \text{Cantaloupes}\end{matrix} = \frac{\begin{matrix}\text{Returns Above Total}\\ \text{Op. Costs for Watermelons}\end{matrix} + \begin{matrix}\text{Operating Costs}\\ \text{of Cantaloupes}\end{matrix}}{\text{Price of Cantaloupes}}$$

$$= \frac{\$339.83 + \$288.75}{\$200/\text{ton}}$$

$$= \frac{\$628.58}{\$200/\text{ton}}$$

$$= 3.14 \text{ tons/acre}$$

Assignment Sheet #6 — Evaluated to the satisfaction of the instructor

ENTERPRISE BUDGETS
UNIT VI

TEST

NAME ________________________ SCORE ____________

1. Match terms associated with enterprise budgets to their correct definitions. Write the correct numbers in the blanks. Definitions are continued on the next page.

______a. Computational method of determining the best course of action from many alternatives, a specific objective, and limited means or resources

______b. Enterprises that are noncompeting or independent of other enterprises on the farm

______c. Plan for the future use of land, labor, capital, and management resources of the farm

______d. Monetary outlay for fixed and variable input factors needed to obtain output

______e. Operating costs that change directly with the level of production because of the different amounts of the variable input needed at different levels of output

______f. Systematic procedure for making decisions

______g. Building blocks of farm plans

______h. Enterprises that use the same resources at the same time; an increase in utilization of one enterprise results in a decrease in production of other

______i. Enterprises in which production of one contributes to production of the other

______j. Schedule of expected returns and costs

______k. Costs incurred by the farm business that do not vary with the level of production in the short run

______l. Receipts and expenses that are difficult to allocate to a specific tax category or enterprise

1. Linear programming
2. Cost of production
3. Enterprises
4. Budgeting
5. Fixed costs
6. Overhead
7. Complementary enterprises
8. Budget
9. Supplementary enterprises
10. Farm budget
11. Variable costs
12. Competing enterprises

TEST

____m. Factor of production or basic resource

____n. Unit of production resulting from the combination of variable and fixed inputs

____o. Sum of total fixed and total variable costs

____p. Amount of feed required to feed 1,000 pounds of livestock for one month

13. Unit of input
14. Unit of output
15. Animal unit month (AUM)
16. Total costs

2. Match types of budgets to their correct definitions. Write the correct numbers in the blanks.

____a. Estimate of the economic effects of some change in the farm business

____b. Statement of expected returns and costs associated with one unit of an enterprise, usually for one production period

____c. Projection of the cash inflows and outflows for a specific time period, usually one year

____d. Physical and financial plan for the entire farm business for some period of time

1. Enterprise
2. Cash flow
3. Partial
4. Whole farm

3. State four reasons for budgeting.

a. ____

____

b. ____

____

c. ____

____

d. ____

____

4. State limitations of budgets.

a. ____

b. ____

c. ____

TEST

5. Arrange in order steps in developing a budget. Write a "1" before the first step, a "2" before the second step, and so on.

_____a. Select physical data to be used in production process

_____b. Inventory farm resources

_____c. Calculate costs and returns

_____d. Appraise goals and objectives

_____e. Select enterprises to be budgeted

_____f. Select prices to apply to physical data

6. State five kinds of physical data used in budgets.

a. ____

b. ____

c. ____

d. ____

e. ____

7. Select from the following list methods of arriving at a price estimate. Write an "X" in the blank before each correct answer.

_____a. Use actual prices from previous year

_____b. Project price based on trends, production cycles, competition, or technology

_____c. Use record of yield from previous year

_____d. Make arbitrary decision of future prices

_____e. Identify items that have several years of useful life

_____f. Use actual prices from a specified period

_____g. Use price range estimates

TEST

8. Select from the following list uses of enterprise budgets. Write an "X" in the blank before each correct answer.

_____a. Estimating effects of risk on an enterprise

_____b. Estimating potential returns for particular farm enterprises

_____c. Estimating cost of production for different agricultural products

_____d. Computing partial budget analysis

_____e. Using linear programming or budgets for farm planning

_____f. Estimating measures of whole farm performance

_____g. Estimating cash flows during the year

_____h. Estimating size of farm needed to earn a certain return

_____i. Estimating break-even yields or prices

9. State sections of an OSU Cooperative Extension Service Enterprise Budget.

a. ____

b. ____

c. ____

d. ____

e. ____

10. Distinguish among characteristics of categories of returns in an enterprise budget. Write an "0" for returns above total operating costs and an "E" for returns above all costs except overhead, risk, and management.

_____a. Returns cover all costs

_____b. Returns cover variable costs

_____c. In short run, as long as this return is positive, operator should continue to produce because at least part of the fixed cost will be paid, thus reducing losses

_____d. In long run, this return must be positive or operator should consider another enterprise

_____e. If this return is negative, operator should not produce because variable costs are not being covered and losses would be minimized by not producing

TEST

11. State three ways OSU Enterprise Budgets may be modified.

a. ____

____

b. ____

____

c. ____

____

12. Select from the following list uses of break-even analysis. Write an "X" in the blank before each correct answer.

_____a. Comparing price or yield needed for a commodity with different costs

_____b. Estimating cash flows during the year

_____c. Comparing price or quantity of input needed with different production returns

_____d. Comparing competing enterprises for break-even points

_____e. Appraising goals and objectives

(NOTE: Test questions 13-18 list the assignment sheets. They are an important part of this test. If they have not been completed, check with your instructor.)

13. Obtain information from front of OSU Enterprise Budget.

14. Obtain information from back of OSU Enterprise Budget.

15. Modify front of OSU Enterprise Budget.

16. Modify back of OSU Enterprise Budget.

17. Compute break-even analysis.

18. Select and modify OSU Enterprise Budgets that represent enterprises in the present farming operation.

ENTERPRISE BUDGETS
UNIT VI

ANSWERS TO TEST

1. a. 1
   b. 9
   c. 10
   d. 2
   e. 11
   f. 4
   g. 3
   h. 12
   i. 7
   j. 8
   k. 5
   l. 6
   m. 13
   n. 14
   o. 16
   p. 15

2. a. 3
   b. 1
   c. 2
   d. 4

3. Answer should include any four of the following
   a. To identify items that have several years of useful life
   b. To evaluate risk
   c. To use systematic approach to uncover items of cost or returns that might be overlooked
   d. To use in refining present organization
   e. To use when seeking credit
   f. To use as an organizational device

4. a. Difficult to compare budgets from one farm to another
   b. Difficult to make accurate estimates of future prices and yields
   c. Time-consuming to prepare

ANSWERS TO TEST

5. a. 4
   b. 2
   c. 6
   d. 1
   e. 3
   f. 5

6. Answer should include any five of the following
   a. Livestock feed requirements and production rates
   b. Fuel and oil requirements
   c. Crop yields
   d. Seeding responses
   e. Labor requirements
   f. Fertilizer and spray responses
   g. Machinery requirements
   h. Production practices

7. a, b, d, f, g

8. a, b, c, d, e, g, h, i

9. a. Operating inputs
   b. Fixed costs
   c. Production
   d. Returns
   e. Additional information

ANSWERS TO TEST

10. a. E
    b. 0
    c. 0
    d. E
    e. 0

11. Answer should include any three of the following
    a. Prices, yields, rates, practices, and costs can be changed to fit the farm situation
    b. Returns and costs can be combined in different ways
    c. Land may be charged as crop or cash rent
    d. Adjustments can be made for other soil or production conditions

12. a, c, d

13. Evaluated to the satisfaction of the instructor

14. Evaluated to the satisfaction of the instructor

15. Evaluated to the satisfaction of the instructor

16. Evaluated to the satisfaction of the instructor

17. Evaluated to the satisfaction of the instructor

18. Evaluated to the satisfaction of the instructor

CASH-FLOW PLANNING
UNIT VII

UNIT OBJECTIVE

After completing this unit, the cooperator should be able to complete a cash-flow projection. The cooperator will show this knowledge by completing assignment sheets and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the cooperator should be able to

1. Match to their correct definitions terms associated with cash-flow planning.
2. Select from a list reasons for proper financial management in a farm business operation.
3. State requirements of cash-flow management.
4. Select from a list benefits of cash-flow planning.
5. State limitations of cash-flow projection.
6. State types of cash-flow plans.
7. Arrange in order steps in making a cash-flow projection.
8. State strategies for increasing repayment capacity.
9. Complete a cash-flow projection.
10. Complete a checklist for analyzing a cash-flow projection.
11. Complete a cash-flow projection and checklist for personal farm situation.

CASH-FLOW PLANNING
UNIT VII

SUGGESTED ACTIVITIES

I. Unit contents

  A. Objective sheet

  B. Suggested activities

  C. Supplements

    1. Supplement #1 — Management Tools for Financial Planning

    2. Supplement #2 — Instructions for Completing Itemized Cash-Flow Input Form

  D. Information sheet

  E. Assignment sheets

    1. Assignment Sheet #1 — Complete a Cash-Flow Projection

    2. Assignment Sheet #2 — Complete a Checklist for Analyzing a Cash-Flow Projection

    3. Assignment Sheet #3 — Complete a Cash-Flow Projection and Checklist for Personal Farm Situation

  F. Answers to assignment sheets

  G. Test

  H. Answers to test

II. Instructor's guide

  A. Obtain and review OSU Extension Fact Sheet No. 751, *Developing a Cash Flow Plan.*

  (NOTE: Instructors may obtain additional copies by contacting their county OSU Extension Director.)

  B. Review Unit VI, "Enterprise Budgets."

SUGGESTED ACTIVITIES

C. Obtain copies of representative enterprise budgets for each cooperator's farm or ranch situation.

   1. *Oklahoma Enterprise Budget Book* (state), and quantity of *Enterprise Budget Book* subscription forms

      (NOTE: Order from Farm Management Extension, Room 513, Ag Hall, Oklahoma State University, Stillwater, Oklahoma 74078.)

   2. Localized *Enterprise Budget Book* for program's area of the state

      (NOTE: Order from Farm Management Extension, Room 513, Ag Hall, Oklahoma State University, Stillwater, Oklahoma 74078; or contact your Area Extension Farm Management Specialist or County Extension Director.)

D. Make transparencies or copies of supplements as appropriate.

E. Provide cooperators with objective sheet.

F. Discuss unit and specific objectives.

   1. Use Supplement #1, "Management Tools for Financial Planning", to help explain that farm records and annual financial statements are historical records of past planning (what has happened); whereas, cash-flow plans, enterprise budgets, and market outlook are records that help determine future planning.

   2. Use the following outline to point out the increased emphasis on farm financial planning:

      a. Higher costs for capital resources

         EXAMPLES: Machinery and equipment, land

      b. Increased risk in farming and ranching

         EXAMPLES: High production costs, fluctuating interest rates, price and yield fluctuations

      c. Increased family living costs

         EXAMPLES: Place in family life cycle, effects of inflation

      d. Current loan-repayment problems

         EXAMPLES: Too much short-term debt

SUGGESTED ACTIVITIES

   e. Increased demand for available farm loan funds

      EXAMPLES: Other businesses, money market funds

   f. Increased amount of financial information needed by agriculture lenders

      EXAMPLES: Coordinated financial statements

3. Ask class members if any of their lenders require a cash-flow plan.

4. Use the following listing as an aid in discussing the purposes of financial analysis and planning:

   a. Provide information on financial position, profitability, and repayment capacity of farm business

   b. Provide early warning of potential financial problems

   c. Provide measures of financial position of farm business

   d. Provide basis for sound farm investment and financing decisions

   e. Improve communication with lender and increase credit capacity of farm business

G. Provide cooperators with information and assignment sheets.

H. Discuss information and assignment sheets.

1. Discuss Objective 1, pointing out the importance of defining terms for common understanding. Terms may be tied to opening remarks about management tools for financial planning.

2. Discuss Objective 2. Present reasons for proper financial management.

   Explain that keeping informed means "staying on top" of business developments on a daily basis.

   Emphasize that allowing a certain degree of flexibility in decisions allows room for adjustments or change if problems should appear. Explain that the ability to develop risk management strategies protects the farm's net worth, especially during periods of poor economic conditions. Point out that often some farm operations pay too much attention to production and marketing risk management strategies, forgetting that financial obligations must be protected from risk as well, particularly during times of low farm earnings when the cash flow is under stress to demonstrate loan repayability.

SUGGESTED ACTIVITIES

Too often, a farm operation faces financial failure simply because problems were discovered too late. Many of these operations could have been saved if only the problem were spotted earlier. A poor understanding of the farm's current financial situation, or the inability to make the necessary adjustment in response to a potential problem or risk, is often the real cause of many farms' financial failures.

Stress that good financial management in a farming operation means developing capabilities for good cash-flow management. During periods of financial hardships, this strategy can be critical for survival of a farm business that is in a highly leveraged debt situation.

3. When discussing Objective 3, emphasize that developing the skills necessary for good cash-flow management may be difficult for some cooperators. Point out the following requirements of good cash flow management:

   a. Cash-flow management requires time and practice, but the results are worth the effort. Cash-flow management allows cooperators to measure accurately the cash-flow potential of the farm business and the loan repayability for the year ahead.

   b. Cash-flow management requires self-discipline. The cooperator must learn to live within the cash-flow budget projections. Spending beyond the farm's ability to generate cash only leads to more serious financial problems.

   c. Efforts must be concentrated on enterprises that generate a net return, and the cooperator should consider eliminating or reducing any income-losing venture in the farming operation.

   d. Capital investments that stretch a farm beyond its debt-serving capacity lead to later but more serious financial problems.

   e. Projection of cash flow under a number of different possible outcomes using various prices, costs, yields, or interest rates is essential. The cooperator must become sensitive to changes in revenues and costs during the year.

   f. The farm's financial performance and cash-flow developments must be monitored on a more regular basis than usual. The cooperator cannot rely on year-end cash-flow comparisons, but must take time to check and compare the actual and projected returns and costs on a monthly or quarterly basis in order to spot potential problems between projected and actual financial performance. The cooperator must also continue to check cash revenues to see that they are being used for purposes consistent with farm business and family goals and objectives.

SUGGESTED ACTIVITIES

4. Discuss Objective 4. Point out that cash-flow planning is a part of most financial discussions, especially between lender and borrower.

5. Point out when discussing Objective 5 that a cash-flow projection is a useful financial management tool, but that it does have limitations. Advise cooperators that in addition to a cash-flow projection, net worth and income statements should also be completed periodically to monitor the performance of the farm business.

6. Discuss Objective 6. Explain that most cooperators dealing with lending institutions will complete some type of annual cash-flow plan. Point out that in *Farm Business Management III* there are several units on whole farm planning and long-range planning.

7. Before discussing Objective 7, review with cooperators *OSU Extension Facts No. 751*, "Developing a Cash-Flow Plan." After discussing the steps in making a cash-flow projection, have cooperators complete Assignment Sheet #1.

8. After discussing Objective 8, have cooperators complete Assignment Sheet #2. Point out when funds will be available to meet high-expense months and debt commitments. Use Supplement #2 to review with cooperators the instructions for completing an Itemized Cash-Flow Input form.

   After cooperators have completed Assignment Sheets #1 and #2, have them begin selecting enterprise budgets to be used in completing Assignment Sheet #3. During on-farm instruction, have cooperators modify the selected enterprise budgets to fit their farm situations.

   At the next class meeting, have cooperators bring the enterprise budgets they have modified for their farm situations and the information needed to complete the nonenterprise receipts and expenses. Have cooperators complete cash-flow projections for their own farm situations.

9. Have cooperators complete Assignment Sheet #3 during individual on-farm instruction. Cooperator may wish to use previous year's cash-flow summary or income tax return as a source for data.

10. Consider using a microcomputer to complete a cash-flow plan. Review the available software programs for one best suited to your situation.

I. Give test.

J. Critique test.

K. Reteach if necessary.

SUGGESTED ACTIVITIES

III. Unit references

A. Albracht, James. *Kansas Postsecondary Farm and Ranch Management Project—Farm Management Basic Core Curriculum*. Pittsburg, Kansas: Pittsburg State University/Vocational Curriculum Materials Center, n.d.

B. Denker, Robert, et al. *Farm Business Management Analysis: Establishing a Farm Accounting System*, Volume XIII, Number 6. Columbia, Missouri: Instructional Materials Laboratory, University of Missouri-Columbia, Volume 13, Number 6, 1981.

C. Hardin, Mike L., and Joseph E. Williams. *Oklahoma Young Farmer Record Book*. Stillwater, Oklahoma: State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1981.

D. Hodgens, Jim, and Leland Myers. *Farm Business Management Year I*. Stillwater, Oklahoma: State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1979.

E. Love, Ross O., Mike L. Hardin, and Harry P. Mapp, Jr. *Developing a Cash Flow Plan*, OSU Extension Facts No. 751. Stillwater, Oklahoma: Oklahoma State University, 1983.

F. Osborn, Donald D., and Kenneth C. Schneeberger. *Modern Agriculture Management*. Reston, Virginia: Reston Publishing Company, Inc., 1978.

G. Schneeberger, Kenneth C., and Donald D. Osburn. *Financial Planning in Agriculture*. Danville, Illinois: The Interstate Printers and Publishers, Inc., 1977.

H. Steward, Jim. *Farm Business Management, Volume II*. Stillwater, Oklahoma: State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1982.

I. Steward, Jim. *Farm Business Management, Volume III*. Stillwater, Oklahoma: State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1981.

SUGGESTED ACTIVITIES

SUPPLEMENT #1

MANAGEMENT TOOLS FOR FINANCIAL PLANNING

A. FARM RECORDS

B. ANNUAL FINANCIAL STATEMENTS

  1. NET WORTH STATEMENT (BALANCE SHEET)

  2. INCOME STATEMENTS (PROFIT AND LOSS STATEMENT)

  3. CASH-FLOW SUMMARY

C. CASH-FLOW PLANS

D. ENTERPRISE BUDGETS

E. MARKET OUTLOOK

SUGGESTED ACTIVITIES

SUPPLEMENT #2

INSTRUCTIONS FOR COMPLETING ITEMIZED CASH-FLOW INPUT FORM

PART A — CASH AND LOAN INFORMATION

(NOTE: Monthly cash flows are calculated for one year starting with the month specified.)

1. Indicate the month to start the cash-flow projection.
2. Enter the beginning cash balance.
3. Enter the operating loan balance.
4. Enter accrued operating loan interest.
5. Enter the minimum beginning-of-the-month cash balance.

   (NOTE: The minimum beginning-of-the-month cash balance is the amount that you want to have in the checking account at the start of each month.)

6. Enter the annual interest rate you expect to pay on the operating loan.

   (NOTE: The cash-flow computer program will adjust the beginning operating loan balance for any new borrowing required and for interest and principal payments.)

PART B — CROP AND LIVESTOCK ENTERPRISE PLANS

(NOTE: Cash costs and returns are calculated using data from OSU Enterprise Budgets.)

1. Enter the name and number of acres or head of each crop or livestock enterprise that will be used during the planning year.
2. Enter the budget identification number for each enterprise.

   (NOTE: A budget identification number is printed at the top of each enterprise budget. If you desire to change the enterprise costs, returns, or labor requirements reported in the budget, check the last column of PART B and attach a copy of the budget with the changes marked on the back of the budget. Leave the budget identification number blank, and specify under "Other farm . . ." cash receipts and cash expenses on PART D if an enterprise budget is not available for a crop or livestock enterprise.)

SUGGESTED ACTIVITIES

SUPPLEMENT #2

PART C — LABOR

(NOTE: The program will calculate the total labor requirements and seasonal hired labor expenses for each month of the planning year.)

1. Enter the number of hours of family and permanent hired labor available.

   (NOTE: Enter monthly salary for permanent hired labor in PART D. The default value is two hundred hours per month if no figure is entered.)

2. Enter the wage rate per hour for seasonal hired labor.

PART D — CASH INFLOWS AND CASH OUTFLOWS

(NOTE: The cash flow computer program calculates the cash receipts and cash expenses for the items shown in the Production and Operating Inputs sections of the enterprise budgets.)

1. Enter monthly salary for permanent hired labor.
2. Enter cash receipts and cash expenses under "Other farm . . ." if unable to enter budget identification number in PART B.
3. Specify receipts or expenses that are not listed in Production and Operating Inputs sections

   (NOTE: Nonenterprise receipts may include government payments, patronage dividends, mineral royalties, machinery and equipment sales, wages received, and nonfarm cash recepts. Nonenterprise expenses may include building and fence repair, farm rent, property taxes, insurance, machinery and equipment purchases, breeding livestock purchases, soil conservation expenses, principal and interest payments on long- and intermediate-term loans, family living expenses, and income taxes.)

PART E — ADDITIONAL INFORMATION

Make additional entries to cash-flow program.

CASH-FLOW PLANNING
UNIT VII

INFORMATION SHEET

I. Terms and definitions

  A. Cash flow — Cash received and cash spent during an accounting period

  B. Cash-flow summary — Financial statement that shows cash received and cash spent during an accounting period

  C. Cash-flow projection — Tool of financial analysis; used to estimate flow of cash through the farm business

  D. Net worth statement — Statement showing the financial condition at a specific time; lists all assets, values of assets, and liabilities of the farm

  E. Income statement — Financial statement reflecting the farm business profitability over a specified period of time

  F. Liquidity — Farm business's capacity to generate sufficient cash to meet its financial obligations as they fall due

  G. Risk — Unfavorable occurrence that can be assigned reasonably accurate odds on the chances of its happening

  H. Uncertainty — Occurrence that cannot be assigned accurate odds on the chances of its happening

II. Reasons for proper financial management in a farm business operation

  A. To keep informed of progress in the business operation

  B. To make needed adjustments in operation as problems arise

  C. To be able to adopt courses of action in response to a risk or uncertainty in the business operation

III. Requirements of cash-flow management

  A. Preparation of complete and accurate cash-flow projection

  B. Control of farm expenses

  C. Recognition of profit opportunities in the farm business

  D. Feasible capital investment decisions that demonstrate a high degree of repayability

  E. Incorporation of impacts of risk and uncertainty into farm's financial planning

INFORMATION SHEET

IV. Benefits of cash-flow planning

- A. Shows amount and timing of operator's credit needs for year
- B. Indicates when and how much the operator should be able to repay
- C. Indicates when idle funds will be available for short-term investment
- D. Aids operator in evaluating plans
- E. Aids creditor in helping operator with financial management
- F. Provides a basis for consultation and reevaluation of cash-flow plan
- G. Serves as a business control tool

  EXAMPLES: Purchasing supplies in advance, planning income tax

V. Limitations of cash-flow projection

- A. Does not measure profitability or net worth
- B. Does not guarantee financial success
- C. Requires large amount of time and effort to complete
- D. Is only as accurate as the input data

VI. Types of cash-flow plans

- A. Transitional cash flow covering more than one year's operation

  (NOTE: Cooperators may develop transitional cash-flow plans only when they are contemplating major changes or expansions to their farm or ranch businesses.)

- B. Annual cash-flow covering production year month by month

  (NOTE: Annual cash flow plans may be developed by grouping income and expenses according to items, or they may be developed by grouping income and expenses according to the enterprise in which they occur.)

VII. Steps in making a cash-flow projection

- A. Determine production and marketing plan for the farm business for the coming year

  EXAMPLES: Identify the number of acres of each crop enterprise; identify the number of head of each livestock enterprise.

INFORMATION SHEET

B. Estimate the amount and timing of cash inflows and outflows expected to occur during the coming year for each enterprise

EXAMPLES: Operating receipts, operating expenses, capital sales, capital expenses

C. Estimate the amount and timing of cash inflows and outflows expected to occur during the coming year for other receipts and expenses

EXAMPLES: Farm operating income and expenses not allocated to enterprises, nonfarm income, nonfarm and family living expenses, principal and interest payments on existing debt

D. Make necessary calculations to determine cash position for a given period

(NOTE: The cash position will be either positive or negative.)

E. Determine cash needs or repayment ability

VIII. Strategies for increasing repayment capacity

A. Increase profitability by changing production and/or marketing plans

EXAMPLES: Rearrange purchases and sales of crops, livestock, and supplies; diversify; specialize; select enterprises with high capital turnover.

B. Change debt structure by refinancing short-term debt

EXAMPLE: Refinance by using equity in real estate.

C. Delay purchases of capital assets

D. Consider leasing of capital assets

E. Develop a marketing plan

F. Seek off-farm employment, part-time or full-time

G. Do custom work

H. Reduce family living expenses

I. Forward price production

J. Consider short-term enterprises that generate income quickly

CASH-FLOW PLANNING
UNIT VII

ASSIGNMENT SHEET #1 — COMPLETE A CASH-FLOW PROJECTION

NAME ______________________________ SCORE ______________

Cash-flow planning is becoming an increasingly valuable tool in farm financial management. Larger farm size, continued substitution of capital assets for labor, and rapidly rising costs of production have increased the amount required to finance the farm business. As a result, a larger proportion of cash outlay associated with the purchase of farm investments and operating inputs is being financed with borrowed funds. As the levels of debt in the farm financial structure increase, both the cooperator and the lending institution are subject to greater risk. It is important that both the borrower and the lender know when and how outstanding debts will be retired and the amount of additional debts that can be carried by the farm or ranch business. Cash-flow planning is a tool of financial analysis that can provide information to answer these questions. By projecting the flow of cash through the business, the cooperator can estimate when and how much annual operating debt will be required, make provisions for its repayment, and determine the repayment capacity of long-term obligations.

Read the following information, and then complete a cash-flow projection for Joe and Mary Farmer.

Joe and Mary Farmer are married and have two sons in high school. Mary works part-time at the high school cafeteria from September through May for $500 per month. The family furnishes all of the labor necessary for the farming operation. The farm share of the utilities averages $100 each month. Joe and Mary anticipate a July bonus payment of $300 per acre on a forty-acre mineral lease. In October, they will also receive an annual mineral lease payment of $10 per acre on 280 acres.

Joe and Mary like to keep a $500 minimum cash balance each month. They estimate their beginning-of-the-year cash balance on January 1 to be $25,500. They annually cash rent 160 acres of native pasture for $15 per acre. One-half of the cash rent is due in January, the remaining one-half in July. They anticipate real estate and personal property taxes of $6,490; $3,200 payable in December, and $3,290 payable in January. The Farmers have insurance premiums of $3,840 due in July. They estimate the February income tax bill to be $5,000. The family living expenses are estimated to be $1,500 each month.

The Farmers expect in December a patronage refund of $1,500 from their local co-op. They also plan to rent their wheat pasture to a neighbor from October 15 to March 1. The neighbor will run one hundred head of steers at $45 per head with one-half of the payment due in October and the remaining half due in March.

Joe and Mary have been farming for several years and have the following accounts payable.

- *Land note for 240 acres* — Original note is for $150,000 at 8.5 percent interest for thirty years. Current balance is $100,000; payment of $14,459 (principal—$5,959; interest—$8,500) is due February 1.

ASSIGNMENT SHEET #1

- *Land note for 160 acres* — Original note is for $100,000 at 7 percent interest for thirty years. Current balance is $80,000; payment of $8,619 (principal—$3,019; interest—$5,600) is due March 15.
- *Land note for 160 acres* — Original note is for $80,000 at 6 percent interest for thirty years. Current balance is $40,000; payment of $5,812 (principal—$3,412; interest—$2,400) is due September 15.
- *Land note for 80 acres* — Original note is for $40,000 at 6 percent interest for thirty years. Current balance is $20,000; payment of $2,906 (principal—$1,706; interest—$1,200) is due August 15.
- *Tractor and equipment note* -- Original note is for $45,000 at 12 percent interest for thirty years. Current balance is $37,916.55; payment of $12,484 (principal—$7,934; interest—$4,550) is due January 15.
- *Operating note at the local bank* — Balance on January 1 will be $40,000 with accrued interest as of January 1 of $5,850 and an interest rate of 15 percent.

Joe and Mary own 640 acres and rent an additional 160 acres of pasture. They plan to harvest 200 acres of dry land cotton, 250 acres of wheat, and 40 acres of alfalfa hay. The Farmers also have a 50-cow beef herd. They have used the following enterprise budgets to estimate their operating costs and total receipts.

ASSIGNMENT SHEET #1

COTTON DRYLAND
LOAM SOILS - OWN EQUIPMENT 200 acres 93710004

OPERATING INPUTS:	UNITS	PRICE	QUANTITY	VALUE	YOUR VALUE
COTTON SEED	LBS.	0.450	18.000	8.10	1620.00
PRE-MERGE HERB	ACRE	12.000	1.000	12.00	2400.00
INSECTICIDE	ACRE	5.000	3.000	15.00	3000.00
NITROGEN (N)	LBS.	0.210	60.000	12.60	2520.00
PHOSPH (P2O5)	LBS.	0.220	40.000	8.80	1760.00
POTASH (K2O)	LBS.	0.150 ~~0.090~~	20.000	3.00 ~~1.80~~	600.00
STORE&PROC EQUIP	ACRE	26.650	1.000	26.65	5330.00
FERT. SPREADER	ACRE	2.000	1.000	2.00	400.00
~~ANNUAL OPERATING CAPITAL~~	~~DOL.~~	~~0.150~~	~~42.314~~	~~6.35~~	
~~LABOR CHARGES~~	~~HR.~~	~~3.880~~	~~2.950~~	~~11.45~~	
MACHINERY FUEL,LUBE,REPAIRS	ACRE			23.45	4690.00
TOTAL OPERATING COST				128.22	22,320.00

~~FIXED COSTS~~		~~VALUE~~	~~YOUR VALUE~~
~~MACHINERY~~			
~~INTEREST AT 15.0%~~	~~DOL.~~	~~25.574~~	
~~DEPR.,TAXES,INSUR.~~	~~DOL.~~	~~23.605~~	
~~LAND~~			
~~INTEREST AT 0.0%~~	~~DOL.~~	~~0.0~~	
~~TAXES~~	~~DOL.~~	~~0.0~~	
~~TOTAL FIXED COSTS~~		~~49.18~~	

PRODUCTION:	UNITS	PRICE	QUANTITY	VALUE	YOUR VALUE
COTTON LINT	LBS.	0.700	400.000	280.00	56000.00
COTTON SEED	LBS.	0.060	720.000	43.20	8640.00
TOTAL RECEIPTS				323.20	64640.00
RETURNS ABOVE TOTAL OPERATING COSTS				194.98	42320.00
~~RETURNS ABOVE ALL COSTS EXCEPT OVERHEAD,RISK AND MANAGEMENT~~				~~145.80~~	

HERBICIDE IS TREFLAN AT 1 1/2 PINT RATE. N,P&K AMOUNTS ARE ACTUAL POUNDS OF MATERIAL HUTSON
TREADWELL 0000001000

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ASSIGNMENT SHEET #1

WHEAT - LOAM SOILS
CUSTOM COMBINE & HAULING

250 acres

76700804

OPERATING INPUTS:	UNITS	PRICE	QUANTITY	VALUE	YOUR VALUE
WHEAT SEED	BU.	5.000	1.250	6.25	1560.00
NITROGEN (N)	LBS.	0.260	90.000	23.40	5850.00
PHOSPH (P2O5)	LBS.	0.220	20.000	4.40	1100.00
POTASH (K2O)	LBS.	0.150	20.000	3.00	750.00
SPRAYER	ACRE	4.000	1.000	4.00	1000.00
CUSTOM COMBINE	ACRE	16.000	1.000	16.00	4000.00
CUSTOM HAULING	BU.	0.150	32.000	4.80	1200.00
SPREADER RENTAL	ACRE	2.250	2.000	4.50	1125.00
MISCL EXPENSE	BU.	0.150	12.000	1.80	450.00
~~ANNUAL OPERATING CAPITAL~~	~~DOL.~~	~~0.200~~	~~33.125~~	~~6.62~~	
~~LABOR CHARGES~~	~~HR.~~	~~4.000~~	~~1.549~~	~~6.20~~	
MACHINERY FUEL, LUBE, REPAIRS	ACRE			12.58	3145.00
TOTAL OPERATING COST				93.55	20180.00

~~FIXED COSTS~~		~~VALUE~~	~~YOUR VALUE~~
~~MACHINERY~~			
~~INTEREST AT 20.0%~~	~~DOL.~~	~~13.646~~	
~~DEPR., TAXES, INSUR.~~	~~DOL.~~	~~9.887~~	
~~LAND~~			
~~INTEREST AT 0.0%~~	~~DOL.~~	~~0.0~~	
~~TAXES~~	~~DOL.~~	~~0.0~~	
~~TOTAL FIXED COSTS~~		~~23.53~~	

PRODUCTION:	UNITS	PRICE	QUANTITY	VALUE	YOUR VALUE
WHEAT	BU.	4.000	32.000	128.00	32000.00
GRAZING	AUMS	0.0	1.300	0.0	—
TOTAL RECEIPTS				128.00	32000.00
RETURNS ABOVE TOTAL OPERATING COSTS				34.45	11820.00
~~RETURNS ABOVE ALL COSTS EXCEPT - OVERHEAD, RISK AND MANAGEMENT~~				~~10.91~~	

N, P & K AMOUNTS ARE IN POUNDS OF ACTUAL MATERIAL.
MISC. EXPENSE IS LOWEST CHARGE FOR YIELD OVER 20 BU.
CUSTOM SPRAY INCLUDES CHEMICAL. TREADWELL

HUTSON
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ASSIGNMENT SHEET #1

ALFALFA
LOAM SOILS
OWN EQUIPMENT - CUSTOM HAULING *40 acres* 31700104

OPERATING INPUTS:	UNITS	PRICE	QUANTITY	VALUE	YOUR VALUE
~~ALFALFA SEED~~	~~LBS.~~	~~1.400~~	~~4.000~~	~~5.60~~	
NITROGEN (N)	LBS.	0.260 ~~0.210~~	20.000	5.20 ~~4.20~~	208.00
PHOSPH (P2O5)	LBS.	0.220	80.000	17.60	704.00
POTASH (K20)	LBS.	0.150 ~~0.090~~	40.000	6.00 ~~3.60~~	240.00
INSECTICIDE	ACRE	4.200 ~~4.000~~	3.000	12.60 ~~12.00~~	504.00
MISCL EXPENSE	BL.	0.070	136.000	9.52	381.00
CUSTOM HAULING	BL.	0.350	136.000	47.60	1904.00
~~ANNUAL OPERATING CAPITAL~~	~~DOL.~~	~~0.153~~	~~5.633~~	~~[illegible]~~	
~~LABOR CHARGES~~	~~HR.~~	~~[illegible]~~	~~5.945~~	~~[illegible]~~	
MACHINERY FUEL, LUBE, REPAIRS	ACRE			38.20 ~~38.00~~	1528.00
TOTAL OPERATING COST				162.02	5469.00

~~FIXED COSTS~~		~~VALUE~~	~~YOUR VALUE~~
~~MACHINERY~~			
~~INTEREST AT 15.0%~~	~~DOL.~~	~~45.[illegible]~~	
~~DEPR., TAXES, INSUR.~~	~~DOL.~~	~~54.723~~	
~~LAND~~			
~~INTEREST AT 0.0%~~	~~DOL.~~	~~0.0~~	
~~TAXES~~	~~DOL.~~	~~0.0~~	
~~TOTAL FIXED COSTS~~		~~100.57~~	

PRODUCTION:	UNITS	PRICE	QUANTITY	VALUE	YOUR VALUE
ALFALFA HAY	TONS	85.000	4.500	382.50	15300.00
RETURNS ABOVE TOTAL OPERATING COSTS				220.48	9831.00
~~RETURNS ABOVE ALL COSTS EXCEPT OVERHEAD, RISK AND MANAGEMENT~~				~~[illegible]~~	

SEED COST IS ALLOCATED OVER 5 YEAR PERIOD. N IS FOR ESTABLISHMENT ONLY. MISCL. EXPENSE IS WIRE COST. HUTSON
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ASSIGNMENT SHEET #1

COW-CALF COST & RETURN PER COW / 75 COW UNIT — 11300318
FALL CALVING OCT. - NOV.

50 Cows

OPERATING INPUTS:	UNITS	PRICE	QUANTITY	VALUE	YOUR VALUE
PRAIRIE HAY	TONS	55.000	1.050	57.75	2887.50
SALT & MIN.	LBS.	0.100	40.800	4.08	204.00
VET & MED.	DOL.	9.570	1.000	9.57	478.50
PERSONAL TAXES	HD.	1.800	1.000	1.80	90.00
BULLS, HERD	HD.	90.000	0.080	7.20	360.00
~~ANNUAL OPERATING CAPITAL~~	~~DOL.~~	~~0.170~~	~~58.657~~	~~9.97~~	
~~MACHINERY LABOR~~	~~HR.~~	~~4.000~~	~~2.03~~	~~8.11~~	
~~EQUIPMENT LABOR~~	~~HR.~~	~~4.000~~	~~5.44~~	~~21.76~~	
~~LIVESTOCK LABOR~~	~~HR.~~	~~4.000~~	~~0.20~~	~~0.80~~	
MACHINERY, FUEL AND LUBE	DOL.			6.32	316.00
MACHINERY REPAIR COST	DOL.			2.49	124.50
EQUIPMENT COST	DOL.			12.85	642.50
TOTAL OPERATING COST				142.70	5103^{00}

~~FIXED COSTS~~	~~AMOUNT~~	~~VALUE~~		~~YOUR VALUE~~
~~MACHINERY~~				
~~INTEREST AT 17.00%~~	~~27.62~~	~~4.70~~		
~~DEPR., TAXES, INSUR.~~		~~4.71~~		
~~EQUIPMENT~~				
~~INTEREST AT 17.00%~~	~~308.80~~	~~52.50~~		
~~DEPR., TAXES, INSUR.~~		~~33.70~~		
~~LIVESTOCK~~				
~~BEEF COW~~	~~624.00~~			
~~BEEF HEIFER~~	~~117.00~~			
~~BEEF BULL~~	~~43.20~~			
~~INTEREST AT 17.00%~~	~~734.20~~	~~133.31~~		
~~DEPR., TAXES, INSUR.~~		~~10.59~~		
~~LAND~~				
~~PASTURE, SUMMER 18.02 AUMS~~		~~0.0~~		
~~INTEREST AT 0.0%~~		~~0.0~~		
~~TAXES~~		~~0.0~~		
~~TOTAL FIXED COST~~			~~239.50~~	

PRODUCTION:	UNITS	PRICE	QUANTITY	VALUE	YOUR VALUE
STRS (5-7) CH	CWT.	80.000	3.036	242.88	12144.00
HFRS (5-7) CH	CWT.	71.000	1.680	119.28	5964.00
CULL COWS	CWT.	55.000	1.600	88.00	4400.00
BULLS, HERD	CWT.	90.000	0.160	14.40	720.00
TOTAL RECEIPTS				464.56	23228.00
RETURNS ABOVE TOTAL OPERATING COSTS				321.86	18125.00
~~RETURNS ABOVE ALL COSTS EXCEPT OVERHEAD, RISK AND MANAGEMENT~~				~~82.36~~	

BERMUDA U.S. FESCUE — BATE &WILLIAMS
ASSUME 92% CALF CROP

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Joe and Mary have also included plans to build a 40-by-100-foot machinery shed during July and August. In June they plan to hire a bulldozer for clearing the rented pastureland at a cost of $1,000. Joe has shopped around and anticipates that the shed will cost $60,000. The Farmers will need a 25 percent down payment ($15,000) payable in July, with the remaining amount of $45,000 financed on a ten-year note at 12 percent interest with annual payments of $7,964.55.

Joe and Mary have estimated the timing of inflows and outflows for their farm business, and have computed the total dollars available and total dollars used. Complete the remaining parts of the following cash-flow projection.

(NOTE: Interest payments on operating notes are always paid first. An exception to this would be a Production Credit Association [PCA] note for which the interest is paid only once each year.)

FORM 6.1P CASH FLOW: PROJECTION

	LINE	JAN	FEB	MAR	APR	MAY	JUNE	6-MONTH SUBTOTAL
RECEIPTS								
Crop Sales Alfalfa hay	1	3075					3050	6125
Wheat	2						32000	32000
	3							
	4							
Government Payments	5							
Custom Work	6							
Dividends, Refunds, Resales	7							
Cash Rent, Other	8			2250				2250
Livestock Products (add columns 9-10)	10							
Misc. Income (add columns 11-12)	12							
Non-Breeding Livestock Raised (add cols. 13-14)	14							
OPERATING SALES TOTAL (add lines 1-14)	A	3075	—	2250	—	—	35050	40375
Livestock Purchd for Resale Sales Tot (add cols 15-16)	16							
Breeding Livestock Sales (add columns 17-18)	18							
Machinery, Equipment, Building Sales	19							
CAPITAL SALES TOTAL (add lines 18-19)	B	—	—	—	—	—	—	—
TOTAL FARM RECEIPTS (add lines A plus 16 plus B)	C	3075	0	2250	0	0	35050	40375
INFLOW FROM LOANS	20							
NON-FARM RECEIPTS	21	500	500	500	600	500		2500
TOTAL DOLLARS AVAILABLE (add lines C plus 20 plus 21)	D	3575	500	2750	500	500	35050	42875
EXPENDITURES								
Hired Labor	25							0
Repairs	26	115	110	110	490	110	453	1388
Interest Payment on Previous Debt Commitments	27	4550	8500	5600				18650
Feed	28	102						102
Seed, Plants, Other	29					1620		1620
Fertilizer, Lime, Chemicals	30		3773	480		7440		11693
Machine Hire	31			1000		800	6600	8400
Supplies	32							0
Breeding Fees	33							0
Miscellaneous Expenses	34					75	525	600
Vet. Medicine	35	119			240			359
Fuel and Oil	36	225	225	225	1665	225	225	2790
Storage	37							0
Taxes	38	3290						3290
Insurance	39							0
Utilities	40	100	100	100	100	100	100	600
Cash Rent	41	1200						1200
Freight, Trucking	42							0
Conservation Expense	43							0
OPERATING EXPEND. TOTAL (add lines 25-43)	E	9701	12708	7515	2495	10370	7903	50692
Livestock Purchd. for Resale Tot. (add cols. 44-45)	45							0
Breeding Stock Purchases	46	360						360
	47							0
Machinery and Equipment Purchased	48							0
Land and Building Improvement	49							0
CAPITAL EXPENSES TOTAL (add lines 46-49)	F	360	—	—	—	—	—	360
TOTAL FARM EXPENSES (add lines E plus 45 plus F)	G	10061	12708	7515	2495	10370	7903	51052
Principal Payment on Previous Debt Commitments	50	7934	5959	3019				16912
Non-Farm Expenses & Investments	51							0
Family Living	FL	1500	6500	1500	1500	1500	1500	14000
TOTAL DOLLARS USED (add lines G thru FL)	H	19495	25167	12034	3995	11870	9403	81964
Beginning Cash Balance	I							
Cash Difference (D-H)	J							
*Cash Position (I+J)	K							
Money Borrowed this Period	L							
Principal Payments on Operating Loan	M							
Interest Payments on Operating Loan	N							
Ending Cash Balance	O							
Accumulated Borrowing ( )**	P							

Accrued Interest ( )**

* Cash Position: Negative figure indicates need to borrow
Positive figure reduces accumulated debt and interest

** Beginning Operating Loan Balance and accrued interest

ASSIGNMENT SHEET #1

F3M I - 589

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FORM 6.2P CASH FLOW PROJECTION

	LINE	JULY	AUG	SEP	OCT	NOV	DEC	6-MONTH SUBTOTAL	YEAR END TOTAL
RECEIPTS									
Crop Sales Alfalfa hay	1	3050	3050				3075	9175	15300
Wheat	2							0	32000
Cotton	3						64640	64640	64640
	4								
Government Payments	5								
Custom Work	6								
Dividends, Refunds, Resales	7						1500	1500	1500
Cash Rent, Other	8				2250			2250	4500
Livestock Products (add columns 9-10)	10								
Misc. Income (add columns 11-12)	12								
Non-Breeding Livestock Raised (add cols. 13-14)	14			18108				18108	18108
OPERATING SALES TOTAL (add lines 1-14)	A	3050	3050	18108	2250	—	69215	95673	136048
Livestock Purchd for Resale Sales Tot (add cols 15-16)	16								
Breeding Livestock Sales (add columns 17-18)	18			5120				5120	5120
Machinery, Equipment, Building Sales	19								
CAPITAL SALES TOTAL (add lines 18-19)	B	—	—	5120	—	—	—	5120	5120
TOTAL FARM RECEIPTS (add lines A plus 16 plus B)	C	3050	3050	23228	2250	0	69215	100793	141168
INFLOW FROM LOANS	20								
NON-FARM RECEIPTS	21	12000		500	3300	500	500	16800	19300
TOTAL DOLLARS AVAILABLE (add lines C plus 20 plus 21)	D	15050	3050	23728	5550	500	69715	117[illegible]93	160468
EXPENDITURES									
Hired Labor	25							0	0
Repairs	26	110	900	110	110	400	110	1740	3128
Interest Payment on Previous Debt Commitments	27		1200	2400				3600	22250
Feed	28	1888	1000	102				2990	3092
Seed, Plants, Other	29			1560				1560	3180
Fertilizer, Lime, Chemicals	30	300		4949				7943	19636
Machine Hire	31	390	390	1449				2229	10629
Supplies	32							0	0
Breeding Fees	33							0	0
Miscellaneous Expenses	34	75	75	80				230	830
Vet. Medicine	35					119		119	478
Fuel and Oil	36	225	225	3370	225	225	241	4511	7301
Storage	37						5330	5330	5330
Taxes	38						3200	3200	6490
Insurance	39	3340						3840	3840
Utilities	40	100	100	100	100	100	100	600	1200
Cash Rent	41	1200						1200	2400
Freight, Trucking	42							0	0
Conservation Expense	43							0	0
OPERATING EXPEND. TOTAL (add lines 25-43)	E	10828	3890	14114	435	844	8981	39092	89784
Livestock Purchd. for Resale Tot. (add cols. 44-45)	45							0	0
Breeding Stock Purchases	46							0	360
	47							0	0
Machinery and Equipment Purchased	48							0	0
Land and Building Improvement	49	15000						15000	15000
CAPITAL EXPENSES TOTAL (add lines 46-49)	F	15000	—	—	—	—	—	15000	15360
TOTAL FARM EXPENSES (add lines E plus 45 plus F)	G	25828	3890	14114	435	844	8981	54092	105144
Principal Payment on Previous Debt Commitments	50		1706	3412				5118	22030
Non-Farm Expenses & Investments	51								
Family Living	FL	1500	1500	1500	1500	1500	1500	9000	23000
TOTAL DOLLARS USED (add lines G thru FL)	H	27328	7096	19026	1935	2344	10481	68210	150174
Beginning Cash Balance	I								
Cash Difference (D-H)	J								
*Cash Position (I+J)	K								
Money Borrowed this Period	L								
Principal Payments on Operating Loan	M								
Interest Payments on Operating Loan	N								
Ending Cash Balance	O								
Accumulated Borrowing ( )**	P								

Accrued Interest ( )**

* Cash Position: Negative figure indicates need to borrow
Positive figure reduces accumulated debt and interest

** Beginning Operating Loan Balance and accrued interest

ASSIGNMENT SHEET #1

FBM I - 591

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CASH-FLOW PLANNING
UNIT VII

ASSIGNMENT SHEET #2 — COMPLETE A CHECKLIST FOR ANALYZING A CASH-FLOW PROJECTION

NAME ________________________________ SCORE ______________

Different forms may be used for completing a cash-flow projection. But once all the inputs and calculations have been completed, what do you have? The purpose of this assignment sheet is to present a systematic approach for analyzing a completed cash-flow projection.

Given the following information and a cash-flow projection for Ol' and May McDonald, complete a checklist to analyze their cash-flow projection.

Ol' and May McDonald are livestock and crop farmers. They are both twenty-six years old and operate the farm as a sole proprietorship. The McDonalds have two children; a daughter, age six; and a son, age five. Ol' lives down the road from his dad and sometimes exchanges his labor for the use of his dad's machinery and equipment.

The McDonalds' farming operation includes raising stocker calves on winter wheat pasture. They own 110 acres of permanent pasture, and sharecrop rent an additional 623 acres of cropland. Their cropping program includes irrigated peanuts, corn, grain sorghum, and wheat. There is a minimum of irrigation of the wheat crop. The peanuts, corn, grain sorghum, and wheat are sold as cash crops.

The McDonalds have decided to complete a computerized cash-flow projection using the Oklahoma State University Itemized Cash-Flow Input forms and enterprise budgets. Ol' and May have a beginning cash balance of $4,000 in their checking and savings accounts. They have a beginning operating loan balance of $56,975 and accrued interest on the operating loan of $500. The McDonalds would like to keep a $500 minimum cash balance each month. Annual interest rate on the operating loan will be 15 percent.

Ol' and May plan to continue their present cropping program and run 147 head of stockers in the coming year. Ol' revised several OSU Enterprise Budgets and attached them to the input forms. Ol' will have additional farm income from the sale of last year's wheat, estimated at $15,500. The McDonalds also estimated their real estate taxes, insurance, utilities, family living expenses, income taxes, and payments on previous debt commitments. They entered these figures on the input forms.

The following are the input forms and enterprise budgets submitted by the McDonalds.

ASSIGNMENT SHEET #2

ITEMIZED CASH-FLOW INPUT FORM

BGICF77

Title McDonald Farms

Name Ol' and May McDonald

Address Oklahoma

A. Complete the following cash and loan information:

Beginning Month (1 = Jan., 2 = Feb., etc.) 1

Beginning Cash Balance $ 4000.00

Beginning Operating Loan Balance $ 56,975.00

Beginning Accrued Operating Loan Interest $ 500.00

Minimum Beginning of Month Cash Balance $ 500.00

Annual Interest Rate on Operating Loan 15.0 %

B. Crop & Livestock Enterprise Plans

Crop Enterprise	Budget Identification Number	Number of Acres	Check if Change in Budget Required*
1. Wheat	76740004	440.0	
2. Peanuts	95700047	25.0	
3. Corn	72101767	48.0	
4. Grain Sorghum	73101967	110.0	
5.			
6.			

Livestock Enterprise	Budget Identification Number	Number of Head	Check if Change in Budget Required*
1. stockers	13701134	147.0	
2.			
3.			
4.			
5.			
6.			

*For each budget to be changed, attach a copy of budget with changes marked, or complete and attach a copy of the Budget Revision Input form (BGr73).

C. The estimated hours and dollar amount of hired labor needed to operate the farm will be calculated for each month of the year. Complete the following labor information.

Hours of free family labor available each month. (Default value is 200 hrs/mo)

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

Wage rate per hour for hired labor $ 4.50 .

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ASSIGNMENT SHEET #2

D. The dollar amount and timing of receipts and expenses not included in the production or operating input sections of the budgets should be entered on the Farm Cash Flow Statements form in the appropriate row and month column. Mark changes in row names on this form. Do not use rows 1-4, 8, 11, 13, 33, 37 or 41. If additional rows are needed, use the space on back of this form.

	Period	1	2	3	4	5	6		7	8	9	10	11	12
CASH INFLOWS	**OPERATING RECEIPTS**													
	1 Livestock: 1							1.						
	2 2							2.						
	3 Crops 1.							3.						
	4 2							4.						
	5 Other Farm Income: 1982 WHEAT							5.		8500	7000			
	6							6.						
	7							7.						
	8 Total Cash Operating Receipts							8.						
	CAPITAL SALES													
	9 Breeding Livestock							9.						
	10 Machinery and Equipment							10.						
	11 Total Cash Receipts From Capital Sales							11.						
	12 Non-Farm Cash Receipts							12.						
	13 Total Cash Inflows (8 + 11 + 12)							13.						
CASH OUTFLOWS	**OPERATING EXPENSE**													
	14 Feeder Livestock Purchases							14.						
	15 Labor Hired							15.						
	16 Repairs: Machinery and Equipment							16.						
	17. Building and Fences							17.						
	18 Rent and Leases							18.						
	19 Feed Purchased							19.						
	20 Seed Purchased							20.						
	21 Fertilizer and Lime							21.						
	22 Chemicals							22.						
	23 Machine Hire							23.						
	24 Livestock Expenses (Vet., Med., Breeding, Supplies)							24.						
	25 Fuel, Oil, Lubricants							25.						
	26 Taxes (R.E. and Personal Property)	200						26.						
	27 Insurance	300	320	152	570	410		27.	300	320	150	300		
	28 Gas, Electricity, Phone, etc.	1,507	1,507	1,500	1,500	1,500	1500	28.	1,500	1,500	1,500	1,507	1,507	1,507
	29 Freight, Trucking							29.						
	30 Conservation and Land Clearing							30.						
	31 Other Farm Operating Expense							31.						
	32							32.						
	33 Total Cash Operating Expenses							33.						
	CAPITAL EXPENSES													
	34 Breeding Livestock							34.						
	35 Machinery and Equipment							35.						
	36 Bldgs., Fences, Tile							36.						
	37 Total Capital Expenditures							37.						
	38 Family Living, Income Tax, Non-Farm Expense	1500	3500	1,500	1500	1,500	1,500	38.	1,500	1,500	1500	1600	1,500	2000
	39 Payments on Previous Debt Commitments: Principal							39.	13501		3172			
	40 Interest							40.						
	41 Total Cash Outflows (33 + 37 + 38 + 39 + 40)							41.						

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ASSIGNMENT SHEET #2

DGICF77

ROW	ITEM	1 JAN	2 FEB	3 MAR	4 APR	5 MAY	6 JUN	7 JUL	8 AUG	9 SEP	10 OCT	11 NOV	12 DEC
Farm income:													
71													
72													
73													
Non farm income:													
121													
122													
Farm operating expense:													
321													
322													
Capital purchase:													
361													
Debt payment:													
401													

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ASSIGNMENT SHEET #2

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100 HEAD STOCKER BUDGET PER HEAD                                   13701134
BUY OCT. 1, 500 LB. STEERS                                         08/01/83
SELL MARCH 1, 775 LB. STEERS                                 MCDONALD FARMS
---------------------------------------------------------------------------
    OPERATING INPUTS:               UNITS     PRICE  QUANTITY    VALUE YOUR VALUE

      STR CALVES(4-500              CWT.     70.000     5.000   350.00 __________
      STARTER FEED                  CWT.     11.000     1.000    11.00 __________
      SALT & MIN.                   LBS.      0.140    12.500     1.75 __________
      TRUCKING                      HD.       3.750     1.000     3.75 __________
      SALES COMM.                   HD.       6.250     1.000     6.25 __________
      VET MEDICINE                  HD.       6.500     1.000     6.50 __________
      UTILITIES                     HD.       1.500     0.150     0.22 __________
      ANNUAL OPERATING CAPITAL      DOL.      0.147   156.298    23.05 __________
      MACHINERY LABOR               HR.       4.500     0.900     4.05 __________
      EQUIPMENT LABOR               HR.       4.500     0.110     0.49 __________
      LIVESTOCK LABOR               HR.       4.500     0.850     3.82 __________
      MACHINERY FUEL,LUBE,REPAIRS   DOL.                            4.39 __________
      EQUIPMENT FUEL,LUBE,REPAIRS   DOL.                            0.09 __________

    TOTAL OPERATING COST                                          415.38 __________
---------------------------------------------------------------------------
    FIXED COSTS                               AMOUNT     VALUE          YOUR VALUE
      MACHINERY
        INTEREST AT 14.75%                     10.20      1.50          __________
        DEPR., TAXES INSURANCE                            1.80          __________
      EQUIPMENT
        INTEREST AT 14.75%                      2.65      0.39          __________
        DEPR., TAXES INSURANCE                            0.57          __________
      LAND
        PASTURE              2.34 AUMS                    0.00          __________
        INTEREST AT  0.00%                      0.00      0.00          __________
        TAXES                                             0.00          __________

    TOTAL FIXED COST                                                4.27 __________
---------------------------------------------------------------------------
    PRODUCTION:                     UNITS     PRICE  QUANTITY    VALUE YOUR VALUE
      STEERS (6-700#)               CWT.     65.000     7.595   493.67 __________
---------------------------------------------------------------------------

    RETURNS ABOVE TOTAL OPERATING COSTS                            78.29 __________

    RETURNS ABOVE ALL COSTS EXCEPT
        OVERHEAD,RISK,AND MANAGEMENT                               74.02 __________
---------------------------------------------------------------------------
100 HEAD STOCKER BUDGET, BUY OCT. 1 - SELL MARCH 1            APPLE, HUTSON
GAIN 1.5#/DAY FROM OCT. 15 TO MARCH 1
                                                   09/06/83      0000101000

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ASSIGNMENT SHEET #2

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WHEAT - CROP SHARE RENT OF 1/3 DEDUCTED                                     76740004
LOAM SOILS                                                                  08/01/83
OWN EQUIPMENT                                                         MCDONALD FARMS
    ------------------------------------------------------------------------------
    OPERATING INPUTS:               UNITS     PRICE  QUANTITY      VALUE YOUR VALUE


      WHEAT SEED                    BU.       6.500     1.330       8.64 __________
      NITROGEN (N)                  LBS.      0.220   100.000      22.00 __________
      INSECTICIDE                   ACRE      4.000     1.000       4.00 __________
      ANNUAL OPERATING CAPITAL      DOL.      0.147    28.241       4.17 __________
      LABOR CHARGES                 HR.       4.500     2.310      10.40 __________
      MACHINERY FUEL,LUBE,REPAIRS   ACRE                           23.28 __________

    TOTAL OPERATING COST                                           72.49 __________
    ------------------------------------------------------------------------------
    FIXED COSTS                               VALUE YOUR VALUE


      MACHINERY
        INTEREST AT 14.7%           DOL.     28.618 __________
        DEPR.,TAXES,INSUR.          DOL.     29.179 __________
      LAND
        INTEREST AT  0.0%           DOL.      0.000 __________
        TAXES                       DOL.      0.000 __________

    TOTAL FIXED COSTS                        57.80  __________
    ------------------------------------------------------------------------------
    PRODUCTION:                     UNITS     PRICE  QUANTITY      VALUE YOUR VALUE


      WHEAT                         BU.       3.550    28.810     102.28 __________
      S.G. PASTURE                  AUMS      0.000     1.300       0.00 __________


    TOTAL RECEIPTS                                                102.28 __________
    ------------------------------------------------------------------------------
    RETURNS ABOVE TOTAL OPERATING COSTS                            29.79 __________

    RETURNS ABOVE ALL COSTS EXCEPT
        OVERHEAD,RISK AND MANAGEMENT                              -28.01 __________
    ------------------------------------------------------------------------------
N, P & K ARE IN POUNDS OF ACTUAL MATERIAL.                                    HUTSON
CUSTOM SPRAY INCLUDES CHEMICAL.
TREADWELL                                                 05/31/83        0000001000

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ASSIGNMENT SHEET #2

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PEANUTS IRRIGATED - CROP SHARE RENT OF 1/3 DEDUCTED                       95700047
SANDY SOIL - OWN EQUIPMENT                                                01/03/83
                                                                    MCDONALD FARMS
    ------------------------------------------------------------------------------
    OPERATING INPUTS:                UNITS     PRICE  QUANTITY      VALUE YOUR VALUE


      PEANUT SEED                    LBS.      0.620   100.000      62.00 __________
      HERBICIDE                      ACRE     12.000     1.000      12.00 __________
      CHEMICALS                      ACRE     95.000     1.000      95.00 __________
      NITROGEN (N)                   LBS.      0.220    60.000      13.20 __________
      PHOSPH (P2O5)                  LBS.      0.240    60.000      14.40 __________
      POTASH (K2O)                   LBS.      0.180    40.000       7.20 __________
      ORGANIZATIONS                  TONS      2.500     1.700       4.25 __________
      ANNUAL OPERATING CAPITAL       DOL.      0.147    91.764      13.54 __________
      LABOR CHARGES                  HR.       4.500     7.295      32.83 __________
      MACHINERY FUEL,LUBE,REPAIRS    ACRE                           61.50 __________
      IRRIGATION FUEL,LUBE,REPAIRS   ACRE                           28.65 __________

    TOTAL OPERATING COST                                           344.57 __________
    ------------------------------------------------------------------------------
    FIXED COSTS                               VALUE YOUR VALUE


      MACHINERY
        INTEREST AT 14.7%            DOL.     45.400 __________
        DEPR.,TAXES,INSUR.           DOL.     46.960 __________
      IRRIGATION
        INTEREST AT 14.7%            DOL.     22.950 __________
        DEPR.,TAXES,INSUR.           DOL.     32.400 __________
      LAND
        INTEREST AT  0.0%            DOL.      0.000 __________
        TAXES                        DOL.      0.000 __________

    TOTAL FIXED COSTS                        147.71  __________
    ------------------------------------------------------------------------------
    PRODUCTION:                      UNITS     PRICE  QUANTITY      VALUE YOUR VALUE


      PEANUTS                        CWT.     14.190    26.800     380.29 __________
    ------------------------------------------------------------------------------
    RETURNS ABOVE TOTAL OPERATING COSTS                             35.73 __________

    RETURNS ABOVE ALL COSTS EXCEPT
        OVERHEAD,RISK AND MANAGEMENT                              -111.98 __________
    ------------------------------------------------------------------------------
N,P&K AMOUNTS ARE ACTUAL POUNDS OF MATERIAL                                 HUTSON
HERBICIDE IS BALAN.
TREADWELL                                               11/24/82        0000001100

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ASSIGNMENT SHEET #2

CORN GRAIN, IRRIGATED - CROP SHARE RENT OF 1/3 DEDUCTED 72101767
CUSTOM HARVEST 01/03/83
CIRCULAR SPRINKLER, 24" WATER, ELECTRIC POWER, $.0447/KWH MCDONALD FARMS

OPERATING INPUTS:	UNITS	PRICE	QUANTITY	VALUE	YOUR VALUE
CORN SEED	LBS.	0.800	25.000	20.00	________
NITROGEN (N)	LBS.	0.330	170.000	56.10	________
PHOSPH (P205)	LBS.	0.240	40.000	9.60	________
HERBICIDE	ACRE	4.000	1.000	4.00	________
INSECTICIDE	ACRE	11.000	1.000	11.00	________
CUSTOM COMBINE	BU.	20.000	1.000	20.00	________
RNTFERTSPRD/ACRE	ACRE	2.000	1.000	2.00	________
INSECTICIDE	ACRE	2.500	1.000	2.50	________
INSECTICIDE	ACRE	2.000	0.500	1.00	________
ANNUAL OPERATING CAPITAL	DOL.	0.147	62.025	9.15	________
LABOR CHARGES	HR.	4.500	1.629	7.33	________
MACHINERY FUEL, LUBE, REPAIRS	ACRE			12.26	________
IRRIGATION FUEL, LUBE, REPAIRS	ACRE			48.82	________
TOTAL OPERATING COST				203.76	________

FIXED COSTS		VALUE	YOUR VALUE
MACHINERY			
INTEREST AT 14.7%	DOL.	10.672	________
DEPR., TAXES, INSUR.	DOL.	10.621	________
IRRIGATION			
INTEREST AT 14.7%	DOL.	22.788	________
DEPR., TAXES, INSUR.	DOL.	17.496	________
LAND			
INTEREST AT 0.0%	DOL.	0.000	________
TAXES	DOL.	0.000	________
TOTAL FIXED COSTS		61.58	________

PRODUCTION:	UNITS	PRICE	QUANTITY	VALUE	YOUR VALUE
CORN	BU.	3.200	77.050	246.56	________
PASTURE	AUMS	0.000	1.400	0.00	________
TOTAL RECEIPTS				246.56	________
RETURNS ABOVE TOTAL OPERATING COSTS				42.80	________
RETURNS ABOVE ALL COSTS EXCEPT OVERHEAD, RISK AND MANAGEMENT				-18.77	________

CIRCULAR SPRINKLER IRRIGATION SYSTEM, 25000 SEED POPULATION GRIFFITH
480 FT. WELL, 360 FT. LIFT, 850 G.P.M.
CUSTOM COMBINE COST INCLUDES HAULING 09/06/83 1000000000

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GRAIN SORGHUM, IRRIGATED - CROP SHARE RENT OF 1/3 DEDUCTED               73101967
CUSTOM HARVEST                                                           01/03/83
CIRCULAR SPRINKLER, 24" WATER, ELECTRIC POWER, $.0447/KWH          MCDONALD FARMS
-----------------------------------------------------------------------------
   OPERATING INPUTS:              UNITS    PRICE  QUANTITY      VALUE YOUR VALUE


     GRAIN SORG SEED              LBS.     0.750    10.750       8.06 __________
     NITROGEN (N)                 LBS.     0.330    60.000      19.80 __________
     HERBICIDE                    ACRE     9.000     1.000       9.00 __________
     INSECTICIDE                  ACRE     4.500     1.000       4.50 __________
     ANNUAL OPERATING CAPITAL     DOL.     0.147    27.244       4.02 __________
     LABOR CHARGES                HR.      4.500     1.617       7.28 __________
     MACHINERY FUEL,LUBE,REPAIRS  ACRE                          12.01 __________
     IRRIGATION FUEL,LUBE,REPAIRS ACRE                          48.82 __________

   TOTAL OPERATING COST                                        113.48 __________
-----------------------------------------------------------------------------
   FIXED COSTS                             VALUE YOUR VALUE


     MACHINERY
       INTEREST AT 14.7%          DOL.    10.15[illegible] __________
       DEPR.,TAXES,INSUR.         DOL.    10.097 __________
     IRRIGATION
       INTEREST AT 14.7%          DOL.    22.788 __________
       DEPR.,TAXES,INSUR.         DOL.    17.496 __________
     LAND
       INTEREST AT  0.0%          DOL.     0.000 __________
       TAXES                      DOL.     0.000 __________

   TOTAL FIXED COSTS                       60.53 __________
-----------------------------------------------------------------------------
   PRODUCTION:                    UNITS    PRICE  QUANTITY      VALUE YOUR VALUE


     GRAIN SORGHUM                CWT.     3.680    46.900     172.59 __________
     PASTURE                      AUMS     0.000     1.400       0.00 __________


   TOTAL RECEIPTS                                              172.59 __________
-----------------------------------------------------------------------------
   RETURNS ABOVE TOTAL OPERATING COSTS                          59.11 __________

   RETURNS ABOVE ALL COSTS EXCEPT
       OVERHEAD,RISK AND MANAGEMENT                             -1.42 __________
-----------------------------------------------------------------------------
CIRCULAR SPRINKLER IRRIGATION SYSTEM                                    GRIFFITH
480 FT. WELL, 360 FT. LIFT, 850 G.P.M.
CUSTOM COMBINE COST INCLUDES HAULING                    09/06/83      1000000000

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The McDonalds received the following computerized cash flow projection.

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                                                                                                        09/15/83
                                 I T E M I Z E D   C A S H   F L O W   S U M M A R Y
                 MCDONALD FARMS
                 1983 PROJECTION
                                                                                               20801

        ITEM           UNITS     JAN      FEB      MAR      APR      MAY      JUN      JUL      AUG      SEP      OCT      NOV      DEC    TOTAL
-------------------------------------------------------------------------------------------------------------------------------------------------
OPERATING RECEIPTS
   LIVESTOCK
 1  STEERS (6-700#)    147.0      0.       0.   72570.       0.       0.       0        0        0.       0.       0.       0.       0    72570.
   CROPS
 3  WHEAT              440.0      0.       0.       0.       0.       0    45001.      0.       0.       0        0.       0        0    45001.
 3B PEANUTS             25.0      0.       0.       0.       0.       0.       0.      0.       0.       0.       0.    9507.       0     9507.
 3C CORN                48.0      0.       0.       0.       0.       0.       0.      0.       0.   11835.       0.       0        0.   11835.
 3D GRAIN SORGHUM      110.0      0.       0.       0.       0.       0.       0.      0.       0.       0.       0.   18985.       0    18985.
 6     1982 WHEAT                 0.       0.       0.       0.       0.       0.      0.    8500.    7000.       0.       0        0    15500.
 8  TOTAL OPER. RECEIPTS          0.       0.   72570.       0.       0.   45001.      0.    8500.   18835.       0.   28492.       0   173399.

CAPITAL SALES AND OTHER INCOME
13  TOTAL CASH INFLOWS            0.       0.   72570.       0.       0    45001.      0.    8500.   18835.       0.   28492.       0   173399.


-------------------------------------------------------------------------------------------------------------------------------------------------
OPERATING EXPENSE
15  LABOR HIRED                   0.       0.       0.       0.       0.    1092.      0.       0.     705.       0.       0        0     1798.
16  MACH & EQUIP REPAIRS         38.     523.     248.      54.     170.    2405.    885.    1139.    1129.      38.     404.      38.    7072.
17  BUILDING & FENCE REPAIR       2.       2.       2.       0.       0.       0.      0.       0.       0.       2.       2.       2.      14.
19  FEED PURCHASED               51.      51.       0.       0.       0.       0.      0.       0.       0.    1668.      51.      51     1874.
20  SEED PURCHASED                0.       0.       0.     960.    1550.     887.      0.       0.    3804.       0.       0        0     7201.
21  FERTILIZER AND LIME           0.    4840.    3154.       0.     650.       0.   1089.    1089.    4840.       0.       0.     220.   15882.
22  CHEMICALS                     0.       0.    1952.     528.    1290.       0.    495.     168.    2375.       0.       0.       0     6808.
23  MACHINE HIRE                  0.       0.      96.       0.       0.       0.      0.       0.       0.     960.       0.       0.    1056.
24  LVSTK EXP(VET,MED,SUPL)       0.       0.       0.       0.       0.       0.      0.       0.       0.     956.       0.       0.     956.
25  FUEL, OIL, LUBRICANTS        91.     694.     363.      77.     319.    3216.   3429.    4471.    2096.      91.     756.      91    15694.
26  TAXES(R.E. & PERS PROP)     200.       0.       0.       0.       0.       0.      0.       0.       0.       0.       0.       0      200.
27  INSURANCE                   300.     320.     150.     570.     410.       0.    300.     320.     150.     300.       0        0     2820.
28  GAS, ELECT, PHONE, ETC     1507.    1507.    1500.    1500.    1500.    1500.   1500.    1500.    1500.    1507.    1507.    1507    18033.
29  FREIGHT, TRUCKING             0.       0.       0.       0.       0.       0.      0.       0.       0.     551.       0.       0      551.
31  OTHR FARM OPERATING EXP       0.       0.     919.       0.       0.       0.      0.       0.       0.   51450.     106.       0    52475.
33  TOTAL OPERATING EXPENSE    2189.    7937.    8384.    3689.    5889.    9100.   7598.    8687.   16600.   57523.    2826.    1909.  132432.

CAPITAL AND OTHER EXPENSE
36  FAM LIVING, INC TAX,ETC    1500.    3500.    1500.    1500.    1500.    1500.   1500.    1500.    1500.    1500.    1500.    2000.   20500.
39  PRIN. PAYMENTS ON DEBT        0.       0.       0.       0.       0.       0.  13501.       0.    3172.       0.       0.       0.   16673.
41  TOTAL CASH OUTFLOWS        3689.   11437.    9884.    5189.    7389.   10600.  22699.   10187.   21272.   59023.    4326.    3909.  169605.

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Item	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year Total
Cash Flow Summary													
Beginning Cash Balance	$4,000	$500	$500	$500	$500	$500	$13074	$500	$ 500	$ 500	$ 500	$ 500	$4,000
Cash Difference	-3689	-11,437	62686	-5189	-7389	34401	-22699	-1687	-2,437	-59023	24166	-3909	3794
Cash Position	311	-10937	63,186	-4689	-6889	34901	-9625	-1187	-1937	-58,523	24666	-3409	7794
Money Borrowed This Period	189	11437	0	5,189	7389	0	10125	1687	2437	59023	0	3909	101385
Principal Payment on Operating Loan	0	0	59901	0	0	21278	0	0	0	0	22797	0	103976
Accrued Interest (500)	(712)	(715)	(858)	(109)	(174)	(266)	(0)	(127)	(148)	(178)	(916)	(631)	(2000)
Interest Payment on Operating Loan*	0	0	2785	0	0	549	0	0	0	0	1369	0	4703
Ending Cash Balance**	500	500	500	500	500	13074	500	500	500	500	500	500	500
56975 Accumulated Borrowing***	57164	68601	8700	13889	21278	0	10125	11,812	14249	73272	50475	54384	X

---

*Interest rate 15% per annum on accumulated borrowing from previous month; beginning interest due $500.

**Ending cash balance must not drop below $500.

***Beginning loan $56,975.

(NOTE: All numbers have been rounded to the nearest dollar. Remember that accrued interest was paid on accumulated borrowing before payment was made on the principal borrowed.)

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ASSIGNMENT SHEET #2

CHECKLIST FOR ANALYZING A CASH-FLOW PROJECTION

DATE COMPLETED: ______________________________

	YES	NO	COMMENTS
VERIFYING ENTERPRISE BUDGETS			
Are all enterprises in the farm or ranch operation included?			
Are all enterprise receipts reported?			
Are all enterprise expenses reported?			
Are any items included more than once?			
Were projected prices consistent throughout all the budgets?			
Was correct month used for reporting income and expenses?			
Other:			
Other:			
VERIFYING CASH-FLOW INPUTS			
Income			
Is all enterprise income accounted for and entered in the correct months?			
Is all other anticipated income such as patronage dividends, accounted for and entered in the correct months?			
Is income from capital sales accounted for and entered in the correct months?			
Is all nonfarm income (wages, bonuses, etc.) reported and entered in the correct months?			
Other:			
Expenses			
Are all enterprise expenses accounted for and entered in the correct months?			
Are feeder livestock purchased for resale entered correctly?			
Are hired labor hours and values reasonable for the farm or ranch operation, and are they entered correctly?			
Are all other nonenterprise operating expenses, such as the farm share of utilities, entered correctly?			
Are fixed costs, such as real estate taxes, personal property taxes, and insurance, entered correctly?			

ASSIGNMENT SHEET #2

	YES	NO	COMMENTS
Are anticipated capital purchases entered correctly? (Down payment or appropriate repayment schedule)			
Are all current debt commitments, interest and principal, accounted for and entered correctly?			
Are family living expenses realistically estimated and entered correctly? (Do not forget personal income taxes.)			
Other:			
	YES	NO	COMMENTS
OTHER INPUTS			
Is the beginning cash balance correct?			
Is the beginning monthly cash balance appropriate?			
Does the cash flow projection begin in an appropriate month?			
Are the beginning operating loan balance and accrued interest balance accurate?			
Is an appropriate interest rate used for the operating loan?			
Other:			
ANALYSIS			
Is there a positive cash position at the end of the year?			
If no — Have you verified numbers you thought were distorted?			
Has all income been included?			
Have you reviewed the relationship of cash inflows and outflows for each month and the totals for the year?			
Other:			
Did borrowing needs change during the year?			
If borrowing increased Were large capital purchases made?			
Were there unexplained operating expenses, such as cattle bought but not sold?			
Did ending inventories increase?			
Were prepaid expenses for last year or this year included in projection?			
Other:			

ASSIGNMENT SHEET #2

	YES	NO	COMMENTS
If borrowing decreased Should additional capital purchases have been made?			
Was there production, such as stocker cattle, grain on inventory, sold and not replaced?			
Were two crops sold in one year?			
Did ending inventory decrease from beginning?			
Other:			
Do you find peak borrowing periods? (High in individual months)			
If yes — Will line of credit have to be restructured?			
Was borrowing because of operating expenses?			
Was borrowing due to increasing inventory?			
Should the purchases of capital items be changed to a different month?			
Other:			
Did accrued interest increase from the beginning to the ending of the year?			
Did accumulated borrowings reach zero at any time during the year?			
If accumulated borrowings reached zero, are there other uses for surplus funds?			
Other:			
Other:			

ADJUSTMENTS TO BE MADE

CASH-FLOW PLANNING
UNIT VII

ASSIGNMENT SHEET #3 — COMPLETE A CASH-FLOW PROJECTION AND CHECKLIST FOR PERSONAL FARM SITUATION

NAME ______________________________ SCORE ____________

Informal cash-flow projections are difficult to evaluate. There is a tendency to forget the bad decisions and remember the good ones. Formalizing a cash-flow projection in writing facilitates the review of the situation when the projection was developed, the exact objectives the strategies, and the reasons for the strategy. Written, formal projections also allow the cooperator to improve financial, production, and marketing efficiency.

By keeping records, the cooperator can compare the cash-flow summary with the cash-flow projection and can more efficiently evaluate financial, production, and marketing plans and come closer to meeting farm business and family goals and objectives.

PART I

Complete a cash-flow projection for your farm situation, using either Forms 6.1P and 6.2P or the Oklahoma State University's Itemized Cash-Flow Input forms on the following page.

(NOTE: For a computerized cash flow using the OSU Itemized Cash-Flow Input form, mail the completed input forms and appropriate modified enterprise budgets to Oklahoma State University, Department of Agricultural Economics, Extension Farm Management, Ag Hall 513, Stillwater, Oklahoma, 74078.)

ASSIGNMENT SHEET #3

ITEMIZED CASH-FLOW INPUT FORM BGICF77

Oklahoma State University
Department of Agricultural Economics
Extension Farm Management

Title ______________________________

Name ______________________________

Address ______________________________

A. Complete the following cash and loan information:

Beginning Month (1 = Jan., 2 = Feb., etc.)	________
Beginning Cash Balance	$ ______.____
Beginning Operating Loan Balance	$ ______.____
Beginning Accrued Operating Loan Interest	$ ______.____
Minimum Beginning of Month Cash Balance	$ ______.____
Annual Interest Rate on Operating Loan	____.____%

B. Crop & Livestock Enterprise Plans

Crop Enterprise	Budget Identification Number	Number of Acres	Check if Change in Budget Required*
1. ________	________	____	____
2. ________	________	____	____
3. ________	________	____	____
4. ________	________	____	____
5. ________	________	____	____
6. ________	________	____	____

Livestock Enterprise	Budget Identification Number	Number of Head	Check if Change in Budget Required*
1. ________	________	____	____
2. ________	________	____	____
3. ________	________	____	____
4. ________	________	____	____
5. ________	________	____	____
6. ________	________	____	____

*For each budget to be changed, attach a copy of budget with changes marked, or complete and attach a copy of the Budget Revision Input form (BGr73).

C. The estimated hours and dollar amount of hired labor needed to operate the farm will be calculated for each month of the year. Complete the following labor information.

Hours of free family labor available each month. (Default value is 200 hrs/mo)

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
____	____	____	____	____	____	____	____	____	____	____	____

Wage rate per hour for hired labor $__________.

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ASSIGNMENT SHEET #3

D. The dollar amount and timing of receipts and expenses not included in the production or operating input sections of the budgets should be entered on the Farm Cash Flow Statements form in the appropriate row and month column. Mark changes in row names on this form. Do not use rows 1-4, 8, 11, 13, 33, 37 or 41. If additional rows are needed, use the space on back of this form.

	Period	1	2	3	4	5	6		7	8	9	10	11	12
CASH INFLOWS	OPERATING RECEIPTS													
	1 Livestock 1							1						
	2 2							2						
	3 Crops 1							3						
	4 2							4						
	5 Other Farm Income							5						
	6							6						
	7							7						
	8 Total Cash Operating Receipts							8						
	CAPITAL SALES													
	9 Breeding Livestock							9						
	10 Machinery and Equipment							10						
	11 Total Cash Receipts From Capital Sales							11						
	12 Non Farm Cash Receipts							12						
	13 Total Cash Inflows (8 + 11 + 12)							13						
CASH OUTFLOWS	OPERATING EXPENSE													
	14 Feeder Livestock Purchases							14						
	15 Labor Hired							15						
	16 Repairs Machinery and Equipment							16						
	17 Building and Fences							17						
	18 Rent and Leases							18						
	19 Feed Purchased							19						
	20 Seed Purchased							20						
	21 Fertilizer and Lime							21						
	22 Chemicals							22						
	23 Machine Hire							23						
	24 Livestock Expenses (Vet., Med., Breeding, Supplies)							24						
	25 Fuel, Oil, Lubricants							25						
	26 Taxes (R.E. and Personal Property)							26						
	27 Insurance							27						
	28 Gas, Electricity, Phone, etc.							28						
	29 Freight, Trucking							29						
	30 Conservation and Land Clearing							30						
	31 Other Farm Operating Expense							31						
	32							32						
	33 Total Cash Operating Expense							33						
	CAPITAL EXPENSES													
	34 Breeding Livestock							34						
	35 Machinery and Equipment							35						
	36 Bldgs., Fences, Tile							36						
	37 Total Capital Expenditures							37						
	38 Family Living, Income Tax, Non Farm Expense							38						
	39 Payments on Previous Debt Commitments: Principal							39						
	40 Interest							40						
	41 Total Cash Outflows (33 + 37 + 38 + 39 + 40)							41						

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BGICF77

ROW	ITEM	1 JAN	2 FEB	3 MAR	4 APR	5 MAY	6 JUN	7 JUL	8 AUG	9 SEP	10 OCT	11 NOV	12 DEC
Farm income:													
71													
72													
73													
Non farm income:													
121													
122													
Farm operating expense:													
321													
322													
Capital purchase:													
361													
Debt payment:													
401													

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FORM 6.1P CASH FLOW: PROJECTION

	LINE	JAN	FEB	MAR	APR	MAY	JUNE	6-MONTH SUBTOTAL
RECEIPTS								
Crop Sales	1							
	2							
	3							
	4							
Government Payments	5							
Custom Work	6							
Dividends, Refunds, Resales	7							
Cash Rent, Other	8							
Livestock Products (add columns 9-10)	10							
Misc. Income (add columns 11-12)	12							
Non-Breeding Livestock Raised (add cols. 13-14)	14							
OPERATING SALES TOTAL (add lines 1-14)	A							
Livestock Purchd. for Resale Sales Tot (add cols 15-16)	16							
Breeding Livestock Sales (add columns 17-18)	18							
Machinery, Equipment, Building Sales	19							
CAPITAL SALES TOTAL (add lines 18-19)	B							
TOTAL FARM RECEIPTS (add lines A plus 16 plus B)	C							
INFLOW FROM LOANS	20							
NON-FARM RECEIPTS	21							
TOTAL DOLLARS AVAILABLE (add lines C plus 20 plus 21)	D							
EXPENDITURES								
Hired Labor	25							
Repairs	26							
Interest Payment on Previous Debt Commitments	27							
Feed	28							
Seed, Plants, Other	29							
Fertilizer, Lime, Chemicals	30							
Machine Hire	31							
Supplies	32							
Breeding Fees	33							
Miscellaneous Expenses	34							
Vet. Medicine	35							
Fuel and Oil	36							
Storage	37							
Taxes	38							
Insurance	39							
Utilities	40							
Cash Rent	41							
Freight, Trucking	42							
Conservation Expense	43							
OPERATING EXPEND. TOTAL (add lines 25-43)	E							
Livestock Purchd. for Resale Tot. (add cols. 44-45)	45							
Breeding Stock Purchases	46							
	47							
Machinery and Equipment Purchased	48							
Land and Building Improvement	49							
CAPITAL EXPENSES TOTAL (add lines 46-49)	F							
TOTAL FARM EXPENSES (add lines E plus 45 plus F)	G							
Principal Payment on Previous Debt Commitments	50							
Non-Farm Expenses & Investments	51							
Family Living	FL							
TOTAL DOLLARS USED (add lines G thru FL)	H							
Beginning Cash Balance	I							
Cash Difference (D-H)	J							
*Cash Position (I+J)	K							
Money Borrowed this Period	L							
Principal Payments on Operating Loan	M							
Interest Payments on Operating Loan	N							
Ending Cash Balance	O							
Accumulated Borrowing ( )**	P							

Accrued Interest ( )**

* Cash Position - Negative figure indicates need to borrow
Positive figure reduces accumulated debt and interest

** Beginning Operating Loan Balance and accrued interest

ASSIGNMENT SHEET #3

FBM I-617

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ASSIGNMENT SHEET #3

FBM I-619

FORM 6.2P CASH FLOW PROJECTION

	LINE	JULY	AUG	SEP	OCT	NOV	DEC	6-MONTH SUBTOTAL	YEAR END TOTAL
RECEIPTS									
Crop Sales	1								
	2								
	3								
	4								
Government Payments	5								
Custom Work	6								
Dividends, Refunds, Resales	7								
Cash Rent, Other	8								
Livestock Products (add columns 9-10)	10								
Misc. Income (add columns 11-12)	12								
Non-Breeding Livestock Raised (add cols. 13-14)	14								
OPERATING SALES TOTAL (add lines 1-14)	A								
Livestock Purchd for Resale Sales Tot (add cols 15-16)	16								
Breeding Livestock Sales (add columns 17-18)	18								
Machinery, Equipment, Building Sales	19								
CAPITAL SALES TOTAL (add lines 18-19)	B								
TOTAL FARM RECEIPTS (add lines A plus 16 plus B)	C								
INFLOW FROM LOANS	20								
NON-FARM RECEIPTS	21								
TOTAL DOLLARS AVAILABLE (add lines C plus 20 plus 21)	D								
EXPENDITURES									
Hired Labor	25								
Repairs	26								
Interest Payment on Previous Debt Commitments	27								
Feed	28								
Seed, Plants, Other	29								
Fertilizer, Lime, Chemicals	30								
Machine Hire	31								
Supplies	32								
Breeding Fees	33								
Miscellaneous Expenses	34								
Vet. Medicine	35								
Fuel and Oil	36								
Storage	37								
Taxes	38								
Insurance	39								
Utilities	40								
Cash Rent	41								
Freight, Trucking	42								
Conservation Expense	43								
OPERATING EXPEND. TOTAL (add lines 25-43)	E								
Livestock Purchd. for Resale Tot. (add cols. 44-45)	45								
Breeding Stock Purchases	46								
	47								
Machinery and Equipment Purchased	48								
Land and Building Improvement	49								
CAPITAL EXPENSES TOTAL (add lines 46-49)	F								
TOTAL FARM EXPENSES (add lines E plus 45 plus F)	G								
Principal Payment on Previous Debt Commitments	50								
Non-Farm Expenses & Investments	51								
Family Living	FL								
TOTAL DOLLARS USED (add lines G thru FL)	H								
Beginning Cash Balance	I								
Cash Difference (D-H)	J								
*Cash Position (I+J)	K								
Money Borrowed this Period	L								
Principal Payments on Operating Loan	M								
Interest Payments on Operating Loan	N								
Ending Cash Balance	O								
Accumulated Borrowing ( )**	P								

Accrued Interest ( )**

* Cash Position Negative figure indicates need to borrow
Positive figure reduces accumulated debt and interest

** Beginning Operating Loan Balance and accrued interest

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ASSIGNMENT SHEET #3

PART II

Complete the following checklist to analyze the cash-flow projection for your farm situation.

CHECKLIST FOR ANALYZING A CASH-FLOW PROJECTION

DATE COMPLETED: ______________________________

	YES	NO	COMMENTS
VERIFYING ENTERPRISE BUDGETS			
Are all enterprises in the farm or ranch operation included?			
Are all enterprise receipts reported?			
Are all enterprise expenses reported?			
Are any items included more than once?			
Were projected prices consistent throughout all the budgets?			
Was correct month used for reporting income and expenses?			
Other:			
Other:			
VERIFYING CASH-FLOW INPUTS			
Income			
Is all enterprise income accounted for and entered in the correct months?			
Is all other anticipated income such as patronage dividends, accounted for and entered in the correct months?			
Is income from capital sales accounted for and entered in the correct months?			
Is all nonfarm income (wages, bonuses, etc.) reported and entered in the correct months?			
Other:			
Expenses			
Are all enterprise expenses accounted for and entered in the correct months?			
Are feeder livestock purchased for resale entered correctly?			
Are hired labor hours and values reasonable for the farm or ranch operation, and are they entered correctly?			
Are all other nonenterprise operating expenses, such as the farm share of utilities, entered correctly?			
Are fixed costs, such as real estate taxes, personal property taxes, and insurance, entered correctly?			

ASSIGNMENT SHEET #3

	YES	NO	COMMENTS
Are anticipated capital purchases entered correctly? (Down payment or appropriate repayment schedule)			
Are all current debt commitments, interest and principal, accounted for and entered correctly?			
Are family living expenses realistically estimated and entered correctly? (Do not forget personal income taxes.)			
Other:			
	YES	**NO**	**COMMENTS**
OTHER INPUTS			
Is the beginning cash balance correct?			
Is the beginning monthly cash balance appropriate?			
Does the cash flow projection begin in an appropriate month?			
Are the beginning operating loan balance and accrued interest balance accurate?			
Is an appropriate interest rate used for the operating loan?			
Other:			
ANALYSIS			
Is there a positive cash position at the end of the year?			
If no — Have you verified numbers you thought were distorted?			
Has all income been included?			
Have you reviewed the relationship of cash inflows and outflows for each month and the totals for the year?			
Other:			
Did borrowing needs change during the year?			
If borrowing increased Were large capital purchases made?			
Were there unexplained operating expenses, such as cattle bought but not sold?			
Did ending inventories increase?			
Were prepaid expenses for last year or this year included in projection?			
Other:			

ASSIGNMENT SHEET #3

	YES	NO	COMMENTS
If borrowing decreased Should additional capital purchases have been made?			
Was there production, such as stocker cattle, grain on inventory, sold and not replaced?			
Were two crops sold in one year?			
Did ending inventory decrease from beginning?			
Other:			
Do you find peak borrowing periods? (High in individual months)			
If yes — Will line of credit have to be restructured?			
Was borrowing because of operating expenses?			
Was borrowing due to increasing inventory?			
Should the purchases of capital items be changed to a different month?			
Other:			
Did accrued interest increase from the beginning to the ending of the year?			
Did your accumulated borrowings reach zero at any time during the year?			
If accumulated borrowings reached zero, are there other uses for surplus funds?			
Other:			
Other:			

ADJUSTMENTS TO BE MADE

CASH-FLOW PLANNING
UNIT VII

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1

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FORM 6.1P CASH FLOW: PROJECTION

	LINE	JAN	FEB	MAR	APR	MAY	JUNE	6-MONTH SUBTOTAL
RECEIPTS								
Crop Sales Alfalfa hay	1	3075					3050	6125
Wheat	2						32000	32000
	3							
	4							
Government Payments	5							
Custom Work	6							
Dividends, Refunds, Resales	7							
Cash Rent, Other	8			2250				2250
Livestock Products (add columns 9-10)	10							
Misc. Income (add columns 11-12)	12							
Non-Breeding Livestock Raised (add cols. 13-14)	14							
OPERATING SALES TOTAL (add lines 1-14)	A	3075	—	2250	—	—	35050	40375
Livestock Purchd. for Resale Sales Tot (add cols 15-16)	16							
Breeding Livestock Sales (add columns 17-18)	18							
Machinery, Equipment, Building Sales	19							
CAPITAL SALES TOTAL (add lines 18-19)	B	—	—	—	—	—	—	—
TOTAL FARM RECEIPTS (add lines A plus 16 plus B)	C	3075	0	2250	0	0	35050	40375
INFLOW FROM LOANS	20							
NON-FARM RECEIPTS	21	500	500	500	500	500		2500
TOTAL DOLLARS AVAILABLE (add lines C plus 20 plus 21)	D	3575	500	2750	500	500	35050	42875
EXPENDITURES								
Hired Labor	25							0
Repairs	26	115	110	110	490	110	453	1388
Interest: Payment on Previous Debt Commitments	27	4550	8500	5600				18650
Feed	28	102						102
Seed, Plants, Other	29					1620		1620
Fertilizer, Lime, Chemicals	30		3773	480		7440		11693
Machine Hire	31			1000		800	6600	8400
Supplies	32							0
Breeding Fees	33							0
Miscellaneous Expenses	34					75	525	600
Vet. Medicine	35	119			240			369
Fuel and Oil	36	225	225	225	1665	225	225	2790
Storage	37							0
Taxes	38	3290						3290
Insurance	39							0
Utilities	40	100	100	100	100	100	100	600
Cash Rent	41	1200						1200
Freight, Trucking	42							0
Conservation Expense	43							0
OPERATING EXPEND. TOTAL (add lines 25-43)	E	9701	12708	7515	2495	10370	7903	50692
Livestock Purchd. for Resale Tot. (add cols. 44-45)	45							0
Breeding Stock Purchases	46	360						360
	47							0
Machinery and Equipment Purchased	48							0
Land and Building Improvement	49							0
CAPITAL EXPENSES TOTAL (add lines 46-49)	F	360	—	—	—	—	—	360
TOTAL FARM EXPENSES (add lines E plus 45 plus F)	G	10061	12708	7515	2495	10370	7903	51052
Principal Payment on Previous Debt Commitments	50	7934	5959	3019				16912
Non-Farm Expenses & Investments	51							0
Family Living	FL	1500	6500	1500	1500	1500	1500	14000
TOTAL DOLLARS USED (add lines G thru FL)	H	19495	25167	12034	3995	11870	9403	81964
Beginning Cash Balance	I	25500	500	500	500	500	500	28000
Cash Difference (D-H)	J	(15920)	(24667)	(9284)	(3495)	(11370)	25647	(39089)
*Cash Position (I+J)	K	9580	(24167)	(8784)	(2995)	(10870)	26147	(11089)
Money Borrowed this Period	L		24667	9284	3495	11370		48816
Principal Payments on Operating Loan	M	2730					21507	24237
Interest Payments on Operating Loan	N	6350					4140	10490
Ending Cash Balance	O	500	500	500	500	500	500	3000
Accumulated Borrowing (40000)**	P	37270	61937	71221	74716	86086	64579	64579

Accrued Interest ([illegible])*

(40000+48816-24237)=64579

* Cash Position: Negative figure indicates need to borrow
Positive figure reduces accumulated debt and interest

** Beginning Operating Loan Balance and accrued interest

Assignment Sheet #1

FORM 6.2P CASH FLOW PROJECTION

	LINE	JULY	AUG	SEP	OCT	NOV	DEC	6-MONTH SUBTOTAL	YEAR END TOTAL
RECEIPTS									
Crop Sales Alfalfa hay	1	3050	3050				3075	9175	15300
Wheat	2							0	32000
Cotton	3						64640	64640	64640
	4								
Government Payments	5								
Custom Work	6								
Dividends, Refunds, Resales	7						1500	1500	1500
Cash Rent, Other	8				2250			2250	4500
Livestock Products (add columns 9-10)	10								
Misc. Income (add columns 11-12)	12								
Non-Breeding Livestock Raised (add cols. 13-14)	14			18108				18108	18108
OPERATING SALES TOTAL (add lines 1-14)	A	3050	3050	18108	2250	—	69215	95673	136048
Livestock Purchd for Resale Sales Tot (add cols 15-16)	16								
Breeding Livestock Sales (add columns 17-18)	18			5120				5120	5120
Machinery, Equipment, Building Sales	19								
CAPITAL SALES TOTAL (add lines 18-19)	B	—	—	5120	—	—	—	5120	5120
TOTAL FARM RECEIPTS (add lines A plus 16 plus B)	C	3050	3050	23228	2250	0	69215	100793	141168
INFLOW FROM LOANS	20								
NON-FARM RECEIPTS	21	12000		500	3300	600	500	16800	19300
TOTAL DOLLARS AVAILABLE (add lines C plus 20 plus 21)	D	15050	3050	23728	5550	500	69715	117593	160468
EXPENDITURES									
Hired Labor	25							0	0
Repairs	26	110	900	110	110	400	110	1740	3128
Interest Payment on Previous Debt Commitments	27		1200	2400				3600	22250
Feed	28	1888	1000	102				2990	3092
Seed, Plants, Other	29			1560				1560	3180
Fertilizer, Lime, Chemicals	30	3000		4943				7943	19636
Machine Hire	31	390	390	1449				2229	10629
Supplies	32							0	0
Breeding Fees	33							0	0
Miscellaneous Expenses	34	75	75	80				230	830
Vet. Medicine	35					119		119	478
Fuel and Oil	36	225	225	3370	225	225	241	4511	7301
Storage	37						5330	5330	5330
Taxes	38						3200	3200	6490
Insurance	39	3840						3840	3840
Utilities	40	100	100	100	100	100	100	600	1200
Cash Rent	41	1200						1200	2400
Freight, Trucking	42							0	0
Conservation Expense	43							0	0
OPERATING EXPEND. TOTAL (add lines 25-43)	E	10828	3890	14114	435	844	8981	39092	89784
Livestock Purchd. for Resale Tot. (add cols. 44-45)	45							0	0
Breeding Stock Purchases	46							0	360
	47							0	0
Machinery and Equipment Purchased	48							0	0
Land and Building Improvement	49	15000						15000	15000
CAPITAL EXPENSES TOTAL (add lines 46-49)	F	15000	—	—	—	—	—	15000	15360
TOTAL FARM EXPENSES (add lines E plus 45 plus F)	G	25828	3890	14114	435	844	8981	54092	105144
Principal Payment on Previous Debt Commitments	50		1706	3412				5118	22030
Non-Farm Expenses & Investments	51								
Family Living	FL	1500	1500	1500	1500	1500	1500	9000	23000
TOTAL DOLLARS USED (add lines G thru FL)	H	27328	7096	19026	1935	2344	10481	68210	150174
Beginning Cash Balance	I	500	500	500	500	500	500	3000	31000
Cash Difference (D-H)	J	<12278>	<4046>	4702	3615	<1844>	59234	49383	10294
*Cash Position (I+J)	K	<11778>	<3546>	5202	4115	<1344>	59734	52383	41294
Money Borrowed this Period	L	12278	4046			1844		18168	66984
Principal Payments on Operating Loan	M			1723	2628		57302	61853	86090
Interest Payments on Operating Loan	N			2779	987		1932	5698	16188
Ending Cash Balance	O	500	500	500	500	500	500	3000	6000
Accumulated Borrowing **	P	76857	80903	78980	76352	78196	20894	20894	20894

Accrued Interest 0.00**

(64579+18168−61853)=20894

(40000+66984−86090)=20894

* Cash Position Negative figure indicates need to borrow
Positive figure reduces accumulated debt and interest

** Beginning Operating Loan Balance and accrued interest

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ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #2

CHECKLIST FOR ANALYZING A CASH-FLOW PROJECTION

DATE COMPLETED: ______________________________

	YES	NO	COMMENTS
VERIFYING ENTERPRISE BUDGETS			
Are all enterprises in the farm or ranch operation included?	X		
Are all enterprise receipts reported?	X		
Are all enterprise expenses reported?	X		
Are any items included more than once?		X	
Were projected prices consistent throughout all the budgets?		X	Nitrogen 22¢/lb on some budgets, 33¢/lb on others
Was correct month used for reporting income and expenses?	X		Difficult to determine because back side of budget unavailable
Other:			
Other:			
VERIFYING CASH-FLOW INPUTS			
Income			
Is all enterprise income accounted for and entered in the correct months?	X		
Is all other anticipated income such as patronage dividends, accounted for and entered in the correct months?	X		
Is income from capital sales accounted for and entered in the correct months?	X		
Is all nonfarm income (wages, bonuses, etc.) reported and entered in the correct months?	X		
Other:			
Expenses			
Are all enterprise expenses accounted for and entered in the correct months?	X		
Are feeder livestock purchased for resale entered correctly?	X		
Are hired labor hours and values reasonable for the farm or ranch operation, and are they entered correctly?	X		
Are all other nonenterprise operating expenses, such as the farm share of utilities, entered correctly?	X		Includes irrigation fuel costs
Are fixed costs, such as real estate taxes, personal property taxes, and insurance, entered correctly?	X		

	YES	NO	COMMENTS
Are anticipated capital purchases entered correctly? (Down payment or appropriate repayment schedule)	X		
Are all current debt commitments, interest and principal, accounted for and entered correctly?	X		
Are family living expenses realistically estimated and entered correctly? (Do not forget personal income taxes.)	X		
Other:			
	YES	**NO**	**COMMENTS**
OTHER INPUTS			
Is the beginning cash balance correct?	X		
Is the beginning monthly cash balance appropriate?	X		
Does the cash flow projection begin in an appropriate month?	X		January
Are the beginning operating loan balance and accrued interest balance accurate?	X		
Is an appropriate interest rate used for the operating loan?	X		
Other:			
ANALYSIS			
Is there a positive cash position at the end of the year?	X		
If no — Have you verified numbers you thought were distorted?			
Has all income been included?			
Have you reviewed the relationship of cash inflows and outflows for each month and the totals for the year?			
Other:			
Did borrowing needs change during the year?	X		
If borrowing increased Were large capital purchases made?			
Were there unexplained operating expenses, such as cattle bought but not sold?			
Did ending inventories increase?			
Were prepaid expenses for last year or this year included in projection?			
Other:			

ANSWERS TO ASSIGNMENT SHEETS

	YES	NO	COMMENTS
If borrowing decreased Should additional capital purchases have been made?	X		Reduced only from $56,975 to $54,384
Was there production, such as stocker cattle, grain on inventory, sold and not replaced?		X	
Were two crops sold in one year?	X		1982 wheat
Did ending inventory decrease from beginning?		X	
Other:			
Do you find peak borrowing periods? (High in individual months)	X		
If yes — Will line of credit have to be restructured?		X	
Was borrowing because of operating expenses?		X	Oct.-Purchased Stockers
Was borrowing due to increasing inventory?		X	
Should the purchases of capital items be changed to a different month?		X	
Other:			
Did accrued interest increase from the beginning to the ending of the year?	X		$500 to $2,000
Did your accumulated borrowings reach zero at any time during the year?	X		June
If your accumulated borrowings reached zero, are there other uses for surplus funds?		X	
Other:			
Other:			

ADJUSTMENTS TO BE MADE — Evaluated to the satisfaction of the instructor

CASH-FLOW PLANNING
UNIT VII

TEST

NAME ______________________________ SCORE ____________

1. Match to their correct definitions terms associated with cash-flow planning. Write the correct numbers in the blanks.

______a. Unfavorable occurrence that can be assigned reasonably accurate odds on the chances of its happening

______b. Financial statement that shows cash received and cash spent during an accounting period

______c. Tool of financial analysis; used to estimate flow of cash through the farm business

______d. Statement showing the financial condition at a specific time; lists all assets, values of assets, and liabilities of the farm

______e. Financial statement reflecting the farm business profitability over a specified period of time

______f. Farm business's capacity to generate sufficient cash to meet its financial obligations as they fall due

______g. Cash received and cash spent during an accounting period

______h. Occurrence that cannot be assigned accurate odds on chances of its happening

1. Income statement
2. Cash-flow projection
3. Uncertainty
4. Cash flow
5. Liquidity
6. Net worth statement
7. Risk
8. Cash-flow summary

2. Select from the following list reasons for proper financial management in a farm business operation. Write an "X" in the blank before each correct answer.

______a. To obtain greater yields per acre

______b. To keep informed of progress in the business operation

______c. To make needed adjustments in operation as problems arise

TEST

______d. To increase milk production per cow

______e. To be able to adopt courses of action in response to a risk or uncertainty in the business operation

3. State three requirements of cash-flow management.

a. ____

____

b. ____

____

c. ____

____

4. Select from the following list benefits of cash-flow planning. Write an "X" in the blank before each correct answer.

______a. Aids creditor in helping operator with financial management

______b. Indicates when and how much the operator should be able to repay

______c. Determines profitability of farm business

______d. Serves as a business control tool

______e. Indicates assets and liabilities of farm business

______f. Aids operator in evaluating plans

______g. Shows amount and timing of operator's credit needs for year

______h. Provides a basis for consultation and reevaluation of cash-flow plan

______i. Shows occurrences that cannot be assigned accurate odds on the chances of their happening

______j. Indicates when idle funds will be available for short-term investment

5. State limitations of cash-flow projection.

a. ____

b. ____

TEST

c. ____________________

d. ____________________

6. State types of cash-flow plans.

a. ____________________

b. ____________________

7. Arrange in order steps in making a cash-flow projection. Write a "1" before the first step, a "2" before the second step, and so on.

______a. Estimate the amount and timing of cash inflows and outflows expected to occur during the coming year for other receipts and expenses

______b. Determine cash needs or repayment ability

______c. Determine production and marketing plan for the farm business for the coming year

______d. Make necessary calculations to determine cash position for a given period

______e. Estimate the amount and timing of cash inflows and outflows expected to occur during the coming year for each enterprise

8. State four strategies for increasing repayment capacity.

a. ____________________

b. ____________________

c. ____________________

d. ____________________

(NOTE: Test questions 9-11 list the assignment sheets. They are an important part of this test. If they have not been completed, check with your instructor.)

9. Complete a cash-flow projection.

10. Complete a checklist for analyzing a cash-flow projection.

11. Complete a cash-flow projection and checklist for personal farm situation.

CASH-FLOW PLANNING
UNIT VII

ANSWERS TO TEST

1.

a.	7	e.	1
b.	8	f.	5
c.	2	g.	4
d.	6	h.	3

2. b, c, e

3. Answer should include any three of the following
    a. Preparation of complete and accurate cash-flow projection
    b. Control of farm expenses
    c. Recognition of profit opportunities in the farm business
    d. Feasible capital investment decisions that demonstrate a high degree of repayability
    e. Incorporation of impacts of risk and uncertainty into the farm's financial planning

4. a, b, d, f, g, h, j

5. a. Does not measure profitability or net worth
    b. Does not guarantee financial success
    c. Requires large amount of time and effort to complete
    d. Is only as accurate as the input data

6. a. Transitional cash flow covering more than one year's operation
    b. Annual cash flow covering production year month by month

ANSWERS TO TEST

7. a. 3
   b. 5
   c. 1
   d. 4
   e. 2

8. Answer should include any four of the following
   a. Increase profitability by changing production and/or marketing plans
   b. Change debt structure by refinancing short-term debt
   c. Delay purchases of capital assets
   d. Consider leasing of capital assets
   e. Develop a marketing plan
   f. Seek off-farm employment, part-time or full-time
   g. Do custom work
   h. Reduce family living expenses
   i. Forward price production
   j. Consider short-term enterprises that generate income quickly

9. Evaluated to the satisfaction of the instructor

10. Evaluated to the satisfaction of the instructor

11. Evaluated to the satisfaction of the instructor

FARM CREDIT
UNIT VIII

UNIT OBJECTIVE

After completing this unit, the cooperator should be able to discuss the role of credit in farming and be able to compare financing methods. The cooperator will show this knowledge by completing assignment sheets and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the cooperator should be able to

1. Match terms associated with farm credit to their correct definitions.
2. Name resources used in farm production.
3. Name reasons for an increased emphasis on farm financial planning.
4. Select from a list guidelines for planning a farm money-management program.
5. Name factors that increase borrowing capacity.
6. Select from a list guidelines for building and maintaining a good credit rating.
7. Name the four *C's* of credit.
8. Select from a list characteristics a borrower looks for in a lender.
9. Select from a list clues to dependability of an agricultural lender.
10. Name characteristics a lender looks for in a borrower.
11. Name conditions that indicate good repayment ability.
12. Select from a list conditions that indicate poor repayment ability.
13. Distinguish among stages of farm-firm life cycle.
14. Name factors to consider in choosing a source of credit.
15. Name factors that determine credit charges.
16. Match classifications of credit to their correct definitions.
17. Distinguish among characteristics of different types of loans.
18. Identify sources of farm credit.

OBJECTIVE SHEET

19. Match methods of computing interest to their correct definitions.
20. Match credit instruments to their correct definitions.
21. Determine credit standing.
22. Calculate interest expense.
23. Compare financing methods.

FARM CREDIT
UNIT VIII

SUGGESTED ACTIVITIES

I. Unit contents

- A. Objective sheet
- B. Suggested activities
- C. Supplements
    - 1. Supplement #1 — New Year's Letter to the Banker
    - 2. Supplement #2 — Borrower's Checklist
- D. Information sheet
- E. Transparency masters
    - 1. TM #1 — Where Do We Get Money?
    - 2. TM #2 — What Is Credit?
    - 3. TM #3 — Wise Use of Credit
    - 4. TM #4 — How to Make Your Farm Home Money Management Plan Work
    - 5. TM #5 — What Information Should the Borrower Know About the Lender?
    - 6. TM #6 — What Information Does a Lender Want from a Borrower?
    - 7. TM #7 — Annual Repayment Capacity
    - 8. TM #8 — Comparing Loan Sources and Cost
    - 9. TM #9 — What Is Interest?
- F. Assignment sheets
    - 1. Assignment Sheet #1 — Determine Credit Standing
    - 2. Assignment Sheet #2 — Calculate Interest Expense
    - 3. Assignment Sheet #3 — Compare Financing Methods
- G. Answers to assignment sheets

SUGGESTED ACTIVITIES

H. Test

I. Answers to test

II. Instructor's guide

A. Order materials planned to supplement unit.

1. *Financing Modern Agriculture*

(NOTE: Order this study manual from Farm Credit Banks of Wichita, 151 North Main, Wichita, Kansas 67202.)

2. Farm credit films

(NOTE: Order from film catalog of Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1500 West Seventh Avenue, Stillwater, Oklahoma 74074.)

B. Make transparencies and copies of supplements.

C. Provide cooperators with objective sheet.

D. Discuss unit and specific objectives.

EXAMPLES: A financial paper once ran a cartoon that depicted a farm woman coming out of a tent, which was the only farm dwelling. The woman was shaking her fist at a farm loan representative, saying, "I have always said we will pay cash for everything we buy." Of what significance is this situation and statement to your future?

Daniel Webster is quoted as saying, "Credit has done a thousand times more to enrich mankind than all the gold mines in the world." What did he mean by this statement?

Use Supplement #1, "New Year's Letter to the Banker," to illustrate some farm and ranch families' attitudes toward credit.

Use Transparency #1, "Where Do We Get Money?" to illustrate that credit is an important source of funds for most farming and ranching operations.

SUGGESTED ACTIVITIES

E. Discuss information and assignment sheets

1. Discuss Objective 1, pointing out the importance of defining terms for common understanding. Use Transparency #2 to explain how credit may easily be regarded as any one of the definitions. Have cooperators discuss how people's views affect their understanding of the terms.

2. When discussing Objective 2, explain how each of the four resources is involved in a typical farming operation. Discuss which resource cooperators consider most important in a successful farming or ranching operation today.

   It has been said that most of the capital that has been acquired by individuals has been obtained through the use of the capital and labor of others. Discuss the extent to which this is true in farming and ranching.

3. Discuss Objective 3. Have cooperators discuss why they are or are not using credit as part of their farm's or ranch's financial planning.

4. When discussing Objective 4, use Transparency #3 to illustrate the wise use of credit to meet the farmer's many needs for money. Explain that farm money management is planning the flow of money through the farm family's hands. To route this flow and avoid leaks, the cooperator needs a planned system.

5. Discuss Objective 5. Point out the importance of considering the risk-bearing ability of the farm or ranch operator and the farm business. Discuss specific factors that have an important relationship to the risk-bearing ability of a specific farm or ranch operation such as enterprise or enterprises involved, operator's equity in the farm business, operator's skill or ability to secure good results, and operator's attitude toward risk and uncertainty and debt.

6. Use Transparency #4 when discussing Objective 6. Have cooperators discuss how they would manage a situation in which money flows out of their bank account faster than it comes into their account. Point out that if the percent of return on capital is greater than the cost of credit, borrowing may be a good business practice if risks are considered.

7. Point out when discussing Objective 7 that individual lenders may place a different emphasis on the four *C's* of credit.

8. When discussing Objective 8, use Transparency #5 to illustrate questions that should be asked about the lender. Have cooperators discuss what they look for in a lender, or ask cooperators why they have chosen to work with a particular agricultural lender.

SUGGESTED ACTIVITIES

9. When discussing Objective 9, emphasize the importance of choosing an agricultural lender who understands farming and ranching.

10. When discussing Objective 10, use Transparency #6 and Supplement #2 to illustrate what a lender may look for in a borrower. Have cooperators complete Assignment Sheet #1 to determine their credit standing. After cooperators have completed the assignment sheet, ask them if they would loan money to their farm business if they were agricultural lenders.

11. Use Transparency #7 when discussing Objectives 11 and 12. Have cooperators give you ten reasons for poor loan repayment ability.

12. Discuss Objective 13, pointing out that a cooperator's attitudes toward risk, uncertainty, debt, and decision making are affected by the stage of the farm firm in the life cycle. Have each farm family determine the stage in the farm-firm life cycle for their farm business.

    Stress that lenders and borrowers do not take the same risks. A properly secured lender gets funds off the top; whereas the borrower takes most of the financial risk with owner's equity. Many producers let the lender either directly or indirectly make the borrowing decision. Yet the risk each faces, as well as the willingness to take risk, is considerably different.

13. Discuss Objective 14. Have cooperators determine which factors they consider most important.

14. Discuss Objective 15, using Transparency #8 to illustrate types of credit costs. Use Transparency #9 to illustrate interest. Discuss why interest rates tend to fluctuate.

15. When discussing Objective 16, have cooperators give examples.

16. Discuss Objective 17. Point out that different sources of credit may be needed for different types of loans.

17. Be very careful in discussing the various lending agencies (you do not want to be quoted negatively) when discussing Objective 18. Survey the cooperators. How many have changed bankers or other credit sources in recent years? Why were the changes made? What credit sources do they use? Update interest rates and loan terms for each source of credit in your credit files.

SUGGESTED ACTIVITIES

18. Have cooperators complete Assignment Sheets #2 and #3 after discussion of Objective 19. Explain why the quotable interest rate on a loan is a very unreliable figure in estimating the true annual rate of interest. Explain that to obtain Annual Percentage Rate (APR) special compound interest tables must be used. Point out that the formula used in the assignment sheets is used to estimate a true annual interest rate.

    (NOTE: There is another commonly used formula for estimating annual percentage rate.

    $$\text{Estimated APR} = \frac{6 \times m \times C}{3P\,(n+1) + C\,(n-1)}$$

    where

    m = Number of payments per year

    C = Total finance charges

    P = Original loan balance

    n = Total number of payments over term of loan

    This formula tends to give a conservative APR estimate, whereas the formula used in the assignment sheets tends to overestimate APR.)

19. Discuss Objective 20.

    a. Explain the importance of using legal credit instruments.

    b. Point out advantages of using checks.

        (1) Protect against danger of loss or theft

        (2) Are more convenient than money

        (3) Provide good evidence of payment, though canceled checks are not receipts

        (4) Make record keeping easier

    c. Have cooperators cite examples of when they use the various credit instruments.

    d. Point out that a warehouse receipt may be worth no more than the financial statement of the warehouse; check current law.

SUGGESTED ACTIVITIES

F. Invite an agricultural lender to speak to the class on lending policies and types of loans at his or her institution.

G. Invite representatives from various credit institutions to form a lenders panel. Ask representatives to discuss the operation of their lending institution, their institution's lending policies, and the types of loans available from their institution. Have an open discussion session between cooperators and lenders. You should serve as moderator for the panel.

EXAMPLES: Production Credit Association, Federal Land Bank, Farmers Home Administration, local banker(s), local real estate developer who specializes in farm sales, local equipment dealer

H. During on-farm instruction, discuss development of a farm financial plan. Assist the cooperator with development of financial statements.

I. Give test.

J. Critique test.

K. Reteach if necessary.

III. Unit references

A. Albracht, James. *Farm Management—Basic Core Curriculum, Kansas Postsecondary Farm and Ranch Management Project.* Pittsburg, Kansas: Pittsburg State University/Vocational Curriculum Materials Center, n.d.

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E. Myers, Jim, and Leland Hodgens. *Farm Business Management Year I.* Stillwater, Oklahoma: State Department of Vocational and Technical Education/ Curriculum and Instructional Materials Center, 1979.

F. Schneeberger, Kenneth C., and Donald D. Osburn. *Financial Planning in Agriculture.* Danville, Illinois: The Interstate Printers and Publishers, Inc., 1977.

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SUGGESTED ACTIVITIES

SUPPLEMENT #1 — NEW YEAR'S LETTER TO THE BANKER

Mr. Greenbacks
Windy Plain National Bank
Windy Plain, Oklahoma

Dear Mr. Greenbacks:

It's time to review 1984 and look ahead to 1985. Suzy and I don't get to town much this time of year so I've decided to write you rather than make a special trip to the bank. Besides, this will give you time to analyze things before you and I sit down to work out how much I can borrow in 1985.

All things considered, 1984 was another one of those exciting "survival" years. The grain embargo (we grass-roots patriotic folks were real pleased to support our national policy) was followed by interest rates that went up like the temperature in July. Then came corn borers, chinch bugs, and stalk rot. But we are still here, and Suzy says that 85 is a lucky number because it's one more than a number that's divisible by four.

With the embargo and not much chance to sell grain, we decided that we had better use as feed the corn we had in the bins. We just about broke even on the hogs, and the cattle kept Herbie (that's our son) from spending too much time in the pool hall. We don't have any livestock this winter. Herbie's too busy with his welding course to look after cattle, and Suzy's too busy learning about bookkeeping and balance sheets to feed the hogs.

Our big machinery purchases last year were the tractor we bought at the neighbor's auction in November and the new combine we bought in December. You see, Zeke was always a good neighbor, and the tractor was going for only what he paid for it new three years ago. Combine sales were slow this year, and we got a big year-end discount—about equal to one year's depreciation. Financing wasn't a big problem. We had some of our line of credit for operating capital left unused to cover the cost of the tractor. No payment is due on the combine until April, so you and I have lots of time to get financing set up for it.

Now we're all set to farm the land we have rented from Zeke. The third 4-wheel drive tractor will give Herbie and me a backup in case we have a problem with one of the tractors during seeding. This extra safety margin will sure reduce our risks. You'll also be happy to know that we didn't go for the guaranteed bushel rent that caught some folks with a short crop this year. We agreed to pay Zeke cash rent, plus pay for all the repairs to the irrigation equipment. Zeke says he's happy to know exactly what he's going to get. He figures he's had enough surprises in farming for one lifetime.

When grain prices went up last summer, land around here went up in value about 10 percent. That should give us plenty of increase in net worth to cover the debt for the tractor and combine and to keep our balance sheet balanced for another year. Suzy thinks we need one of those new microcomputers to keep our records straight. Herbie says we could do a fancy-looking cash flow for the banker if we had a computer. Do you think your credit department would go for a lower interest rate if we had a computer?

Markets look good, and with a little luck from the weatherfolks, you and I will be equal partners in all this prosperity in 1985. See you in a couple of months to finalize things for the year.

Sincerely,

Jeff

SUGGESTED ACTIVITIES

SUPPLEMENT #2 — BORROWER'S CHECKLIST

	Your Appraisal			
Management Characteristics	Excellent	Good	Average	Poor
Has specific and definite goals and objectives. (Ranging from having well-defined goals and objectives to being content to see what tomorrow brings)	☐	☐	☐	☐
Possesses ability to analyze accurately the difference between what is and what ought to be within the framework of these goals. (Ranging from ability to identify real problems on an economic, realistic basis to an inability to define problems in specific enough terms to identify them)	☐	☐	☐	☐
Possesses ability to analyze and think through problems; demonstrates good judgment. (Ranging from an ability to sort out big management decisions from little ones to an inability to see the forest for the trees)	☐	☐	☐	☐
Has the initiative and imagination necessary to acquire new knowledge of farming methods and production techniques. (Ranging from a willingness to investigate to a feeling of only frustration in new ideas)	☐	☐	☐	☐
Possesses ability to take action and get things done; has ambition, enthusiasm, and perseverance. (Ranging from a desire to move ahead to a preference to stick to existing or historical practices)	☐	☐	☐	☐
Takes time to manage; is ready to take advantage of unique opportunities when they appear. (Ranging from finding or making time to manage to mistaking activity for accomplishment)	☐	☐	☐	☐
Credit Characteristics				
Comprehends the responsibility and risk assumed in using credit. (Ranging from an acceptance of financial responsibility to a complete lack of understanding	☐	☐	☐	☐
Has ability to handle large amounts of borrowed money in a productive way. (Ranging from maximizing use of money to being easily tempted to use funds for immediate satisfaction)	☐	☐	☐	☐
Has credit reputation of honesty, dependability, and integrity. (Ranging from promptness in meeting obligations to being indifferent to credit commitments)	☐	☐	☐	☐
Family Characteristics				
Spouse and family have positive attitudes toward the farm business and repayment of credit. (Ranging from a steadfast dedication to the overall operation to an antagonism toward farming and related matters)	☐	☐	☐	☐

FARM CREDIT
UNIT VIII

INFORMATION SHEET

I. Terms associated with farm credit

A. Credit — Capacity to borrow money

(NOTE: Credit is sometimes known as the process of acquiring the services of an input and paying for it later.)

B. Collateral — Items pledged or mortgaged to secure a note

C. Line of credit — Financial arrangement that provides funds to cover operating and capital expenses during a complete farming cycle, normally one year

D. Risk — Unfavorable occurrence that can be assigned reasonably accurate odds on chances of its happening

E. Uncertainty — Occurrence that cannot be assigned accurate odds on chances of its happening

F. Liquidity — Farm business's capacity to generate sufficient cash to meet its financial obligations as they fall due

G. Solvency — Farm business's ability to meet long-run claims against the business

H. Financial leverage — Use of borrowed funds to supplement equity capital

I. Risk-bearing ability — Farm business's ability to compensate for variations in expenses and income as well as judgment errors in use of credit

J. Amortization — Repayment of a loan with a regular series of payments over a specified period of time

K. Variable interest rate loans — Loans in which interest rates may be lowered or raised, depending upon the cost of money in the markets

L. Prime interest rate — Going rate charged by lender for short-term loans to best credit risks

M. Base rate — Interest rate charged by lender that covers cost of money plus a reasonable profit

INFORMATION SHEET

N. Annual Percentage Rate (APR) — Total finance charge on a loan expressed as an annual interest rate based upon compound interest tables

(NOTE: APR is part of the Truth-In-Lending legislation passed by Congress. Calculation is not simple. Most lenders use a specially prepared table to compute APR.)

II. Resources used in farm production

A. Land

B. Labor

C. Capital

D. Management

III. Reasons for an increased emphasis on farm financial planning

A. Increased costs of land and capital resources

B. Increased risk in farming and ranching

C. Increased family living costs

D. Increased problems with current loan repayment

E. Increased demand for available farm loan funds

F. Increased amount of financial information needed by agricultural lenders

IV. Guidelines for planning a farm money-management program

A. Consider family values by listing farm business and family goals

B. Figure net worth at a given time

C. Refer to cash-flow plan when budgeting day-to-day needs and wants

D. Plan for emergencies and protect against loss and hazards

E. Acquire credit for use in enterprises that yield at least the cost of credit

F. Check and reevaluate plans periodically

INFORMATION SHEET

V. Factors that increase borrowing capacity

   A. Good managerial ability

   B. Sufficient repayment capacity

   C. Increased price of commodity

   D. Increased size of operation

   E. Additional income

VI. Guidelines for building and maintaining a good credit rating

   A. Establish a credit rating

   B. Obtain credit from specialists

   EXAMPLES: Commercial banks, Federal Land Bank, Production Credit Association

   (NOTE: A lender who makes farm loans regularly will understand your farming problems and be more sympathetic to your needs.)

   C. Use the right type of credit

   EXAMPLES: Short-term for seasonal operating expenses; intermediate-term for large equipment purchases; long-term for financing land or capital improvements

   D. Plan ahead for credit needs

   EXAMPLE: Cash-flow projections

   E. Borrow to make or save money

   (NOTE: The cardinal rule for farm business borrowing should be "Borrow only when the borrowed funds will earn more than the cost of borrowing them.")

   F. Plan the use of loan funds with the lender

   G. Work out a repayment plan for every loan

   H. Meet payments when due

   (NOTE: If unforeseen circumstances arise that may cause you to miss a payment, talk things over with the lender before the payment is due. Tell the lender what your problem is and when you expect to be able to make payment. It is important to express your intentions, even though you are temporarily unable to make payment.)

INFORMATION SHEET

I. Avoid accumulating debts in several places

(NOTE: Such accumulated debts are a sign to lenders that you are not planning your credit needs.)

J. Take an annual inventory

(NOTE: An inventory will provide information for financial statements and allow you to take a look at your financial position.)

VII. Four C's of credit

- A. Character
- B. Capacity to repay
- C. Condition of times
- D. Collateral

VIII. Characteristics a borrower looks for in a lender

- A. Character (reputation)
- B. Lender's policies
- C. Permanence and dependability
- D. Knowledge of agriculture
- E. Cost of credit

IX. Clues to dependability of an agricultural lender

- A. Makes loans to farmers or ranchers a major source of business
- B. Sticks with progressive and responsible farmers and ranchers through bad times, as well as good
- C. Understands farming and ranching and the various credit needs
- D. Is capable of handling a growing business loan through peak need periods
- E. Is willing to fit the repayment of your loan to your specific situation, and will renew your loan if it is logical to do so
- F. Has a reputation for honesty, integrity, and fairness

INFORMATION SHEET

X. Characteristics a lender looks for in a borrower (Assignment Sheet #1)

  A. Character (reputation)

  B. Managerial ability

  C. Financial position

  D. Ability to repay

  E. Purpose of loan

  F. Security for loan

XI. Conditions that indicate good repayment ability

  A. Adequate-sized business yielding a good growth income

  B. Efficient production or high yield per unit

  C. Good price per unit for product sold

  D. Low cash production cost per unit of production

  E. Low cash overhead cost per unit of production

  F. Good farm business and family management

XII. Conditions that indicate poor repayment ability

  A. Small business yielding a low gross income

  B. Low production per unit

  EXAMPLES: Poor crop yields, small calf crop, small pig crop, low returns from dairy

  C. Low price per unit sold

  EXAMPLES: Poor market, poor marketing, poor quality, low general price situation

  D. High cash production costs per unit of production

  EXAMPLES: High feed costs, high labor costs, high replacement costs

INFORMATION SHEET

E. High cash overhead costs per unit of production

EXAMPLES: Heavy debt load, high interest rates, heavy taxes, high maintenance costs for buildings and machinery

F. Unforeseen cash living costs

EXAMPLES: Sickness, education of children, extravagance

G. Unplanned purchases or expenses

EXAMPLES: Tractor overhaul, barn repair

H. Borrowing above ability to repay

I. Overestimating amount of loan that can be repaid each year

XIII. Stages of the farm-firm life cycle

(NOTE: Credit use, cooperator attitudes, and cooperator decisions are affected by an observed time pattern or life cycle of the farm firm. Generally, a farm firm can be expected to pass through four stages in its life cycle.)

A. Establishment

1. Capital constraints may be quite severe
2. Financial management and production ability are unproven
3. Main objective appears to be the development of a viable organization and control of sufficient resources to nurture future growth

B. Expansion

1. Cooperator is typically young, long on energy, and probably willing to assume a few risks
2. Typical cooperator seeks to utilize management capacity more fully
3. Cooperator seeks economic security
4. Cooperator wants a competitive position in the industry

C. Consolidation

1. Capital accumulation and growth may be a low priority

INFORMATION SHEET

2. Cooperator appears to have control of farm firm and is probably in strongest financial position

3. Cooperator's attention will likely turn to such factors as debt-free ownership, stability, and maintenance of income

4. Cooperator will have less need for borrowed funds

5. Cooperator may have increased managerial maturity

   (NOTE: Continued growth may represent a shift in the cooperator's state of mind resulting from increased managerial maturity, rather than overt economic behavior.)

D. Transfer

1. Cooperator may be relatively long on experience and capital

2. Cooperator may be short on energy and length-of-planning horizon

3. Retirement income and inflation protection become important

4. Cooperator is interested in transferring assets in an equitable fashion and at a minimum cost to heirs

5. Cooperator may want to preserve management continuity and production efficiency as the business is transferred to new management

   (NOTE: In large firms with several specialized managers, the effects of the transfer stage may be much less noticeable.)

XIV. Factors to consider in choosing a source of credit

A. Amount of loan

B. Rate of interest

C. Length of loan period

D. Repayment schedule

E. Size of payments

F. Reliability of lending agents

G. Additional credit charges

INFORMATION SHEET

XV. Factors that determine credit charges

A. Cost of money in the money market

EXAMPLES: Interest paid on lending institution's savings accounts, treasury bonds

B. Service cost of loan

EXAMPLES: Keeping records, liens, collection

C. Risk of loss

EXAMPLE: Bad loan

XVI. Classifications of credit

A. Production credit — Will generally return its original cost plus an amount for interest and profit

(NOTE: Production credit is usually treated as a part of the cost of doing business, the same as any other production input.)

B. Consumption credit — Is for personal use rather than for a use that will generate future income

(NOTE: Consumption credit allows people to satisfy present wants without first accumulating the necessary money.)

XVII. Characteristics of types of loans

A. Short-term loans

1. Extend for periods up to one year

2. Are used for current operating expenses and for payment of nonfarm cash expenses

EXAMPLES: Fertilizer, seed, feed, beef stockers, futures contracts, family living expenses

B. Intermediate-term loans

1. Extend for periods from one to ten years

2. Are used for purchase or repair of depreciable assets

EXAMPLES: Machinery, equipment, breeding livestock, building, irrigation equipment

INFORMATION SHEET

C. Long-term loans

1. Extend for periods over ten years
2. Are used for real estate purchases and for refinancing other loans

XVIII. Characteristics of farm credit sources

A. Commercial banks

1. Make borrowing convenient
2. Consider personal needs
3. Approve loans quickly
4. Make loans for a diversity of items
5. Make character loans
6. Have widely varied interest rates
7. Usually offer only short-term credit
8. Usually have limited loan amounts available for land purchases

B. Individuals

1. May offer low rate of interest
2. Provide immediate loan availability
3. Provide good possibilities for negotiating amount of payment and interest rate
4. May make land purchase loans
5. Offer possibility for seller of land to spread income from sale of land over a period of time
6. May not be dependable

C. Finance companies

1. Make loans available for poor-risk borrowers
2. Generally provide immediate loan approval
3. Usually offer only short-term credit

INFORMATION SHEET

4. Charge extremely high interest rates
5. May use high-pressure sales technique on borrower
6. Charge high closing fees

D. Federal Land Bank Association

1. Usually provides favorable interest rates on long-term loans
2. Provides long-term loans ranging from twenty to forty years
3. Considers economic conditions in loan process
4. Requires complicated procedures for loan application
5. Requires that borrower buy shares
6. May have limited amount of funds available for loan

E. Production Credit Association

1. Offers variable interest rates
2. Has unlimited amount of funds available for loan
3. Allows interest to be paid only for length of time money is used
4. Requires that records be kept
5. Requires that borrower buy shares
6. Requires that loans be renewed annually
7. May be inconveniently located

F. Farmers Home Administration

(NOTE: Check with county supervisor about changes in law.)

1. Makes loans, except for emergency loans, available to individuals who do not qualify for other types of loans
2. Provides loan terms ranging from short-term to long-term
3. Provides reasonable rates and terms for repayment
4. May provide advice, assistance, and supervision from county supervisor

INFORMATION SHEET

5. Makes special loans to youth
6. Requires that records be kept
7. Is not intended as permanent source of financing

   (NOTE: Borrowers are expected to refinance when suitable commercial sources become available.)

G. Insurance companies

1. Provide long-term mortgages

   (NOTE: Only first mortgages are possible, and short-term loans are prohibited by most states.)

2. Provide low interest rates
3. Have no upper limits on size of loan made
4. Make loans only in selected areas
5. Forbid repayment of loan in one payment

H. Merchants and dealers

1. Provide loans for poor-risk borrowers
2. Are conveniently located for farmers
3. Provide immediate loan availability
4. Make loans for large percentage of appraised value
5. Usually design repayment schedule for needs of borrower
6. Have wide range of interest rates and terms

I. Oklahoma Commissioners of the Land Office (School Land Commission)

1. State law and legislative action affect loan terms, maximum amounts, and interest rates
2. Provides reasonable interest rates
3. Makes long-term loans
4. Makes loans to farmers
5. Puts loan limitations on appraised agricultural value

INFORMATION SHEET

XIX. Definitions of methods of computing interest (Assignment Sheets #2 and #3)

A. Simple interest — Interest paid for borrowing money that is repaid in a single lump sum; calculated by multiplying sum borrowed by interest rate times time period of loan

B. Remaining balance — Interest calculated by multiplying outstanding principal by contractual rate for period in question

C. Add-on — Interest based on original loan for entire period of loan; the sum of total interest and principal is divided by number of payments to obtain amount of each installment

D. Discount — Interest calculated on original amount of loan for full period of loan; this amount, plus any other loan costs, is subtracted from amount of loan at the beginning, with borrower receiving the difference

XX. Definitions of credit instruments

A. Check — Written order authorizing financial institution to pay stated sum of money from depositor's account to person named

B. Draft — Written order from one party to another directing that party to pay money to a third party

C. Promissory note — Written promise of borrower to repay a certain sum of money to a certain person or bearer on demand or on a specified date

D. Mortgage — Legal assignment of property to a creditor as security for a debt, the assignment to be void upon completed payment of debt

E. Bill of sale — Written statement certifying that ownership of something has been transferred by sale

F. Warehouse receipt — Document given by a warehouse representative for goods received for storage; evidence that the person named in the receipt has deposited a specified amount of products with representative

G. Financing statement — Form used to provide public information to the county clerk on the security for a loan

H. Security agreement — Document that spells out the rights and duties of both parties to a loan and gives the lender a security interest in the borrower's personal property, which is described therein

INFORMATION SHEET

I. Loan application — Written application for a loan that shows the lender how much money is wanted, for what purpose the money is to be used, and how and when the borrower plans to pay the money back

J. Bill of lading — Contract or receipt signed by a common carrier; agreement to deliver described freight to a given person at a stated place

K. Sales contract — Written agreement by one party to sell a property or a service to a second party for a stated price, and under stated conditions

Where Do We Get Money?

1. **Earned Income**

   Wages, salary, earnings
   from investments

2. **Gifts and Inheritances**

   One-third of farmers receive
   gifts and inheritances

3. **Sale of Assets**

   Corn, hogs, bonds, stocks,
   grain, and so forth

4. **Borrowed Money**

FBM I - 667

What Is Credit?

. . . . A Friend in Need?

. . . . A Disgrace?

. . . . A Two-Edged Sword?

. . . . A Valuable Tool?

. . . . Bait for Bankruptcy?

TM #2

Wise Use of Credit

1. Use credit for productive purposes.
2. Limit borrowing on unfamiliar enterprises.
3. Use credit where it will generate the highest return within reasonable risk limits.
4. Know your own situation.
5. Keep debts in line with income and repayment capacity.
6. Shop for a loan and a dependable lender.
7. Be businesslike, frank, and fair in credit dealings.

How to Make Your Farm Home Money Management Plan Work

1. **Watch your buying.**

   Buy in quantities as large as practicable.

   Watch for sales—if price levels are actually reduced.

   Buy only what you need even if price is low.

2. **Include children in planning. Train them in money management.**

3. **Divide financial responsibility among all members.**

   Encourage family cooperation. Assign each mature individual responsibility for a financial area.

4. **Analyze your use of credit carefully.**

5. **Be flexible in your planning.**

   Unexpected events change budgets—change your plan with the changing situation.

What Information Should the Borrower Know About the Lender?

1. What types of farm loans are available?
2. What size of loan is the lender willing or able to make?
3. What are the annual interest charges and other costs associated with the loan? Is the interest rate fixed or variable?
4. Can a repayment plan be developed that will fit the repayment capacity of the farm business?
5. How will the lender handle future financing needs?
6. Can payments be made ahead of schedule or deferred; and if so, at what cost?

What Information Does a Lender Want from a Borrower?

1. Accurate and up-to-date net worth statement showing all assets and liabilities
2. Amount of debt financing required and purpose of loan funds
3. Analysis of repayment capacity of the farm business
4. Accurate records of previous performance of the farm business
5. Information concerning farm production and marketing plans, future debt financing needs and potential financial problems

FBM I - 677

Annual Repayment Capacity

Cash Farm Income ____________

Minus Cash Farm Expenses – ____________

Equals Net Cash Farm Income ____________

Plus Nonfarm Income + ____________

Equals Total Net Income ____________

Minus Family Living Expense – ____________

Minus Income and Social Security Taxes – ____________

Minus Capital Asset Purchases – ____________

Minus Principal and Interest on Existing Debt – ____________

Equals Annual Cash Available for New Debt Service ____________

Comparing Loan Sources and Cost

1. Interest
    - On unpaid balance?
    - On original amount of loan?
    - Paid in advance?
2. Carrying Charges
3. Time Differential Charges
4. Inspection Fees
5. Closing Costs

What Is Interest?

. . . Cash

. . . Rent

. . . Wages

We pay for the
use of money.

FARM CREDIT
UNIT VIII

ASSIGNMENT SHEET #1 -- DETERMINE CREDIT STANDING

NAME ______________________________ SCORE ______________

Some farmers and ranchers are of the opinion that the borrower is at the mercy of the lenders. This need not be the case. In fact, it should rarely be the case. Just as farm families must keep their resources in use to make a profit, so lenders must keep their resources busy. Lenders make profits by loaning money.

An important aspect in acquiring and using credit is being businesslike. A farmer or rancher who does not attempt to anticipate the questions a lender will have may not get the best loan terms the lender is capable of extending.

Determine your credit standing by answering the following questionnaire. Check (✓) the appropriate response. If the majority of your responses fall in the "yes" column, you are a good credit risk.

WHAT KIND OF CREDIT RISK AM I?

Is My Borrowing Built Around Sound Planning?		**Yes**	**No**
A.	Do I have well-defined long-term farm business and family goals and objectives?	☐	☐
B.	Is my lender acquainted with my long-term farm business plan, including adjustments or changes in livestock systems, building improvements, equipment purchases, and cropping plans?	☐	☐
C.	Is each loan request related to this long-term plan?	☐	☐
D.	Do I borrow primarily for productive purposes?	☐	☐

Do I Manage the Family Side of the Farm Business as Well as the Farm Side?		**Yes**	**No**
A.	In case of a family financial emergency, do I first consult my regular agricultural lender?	☐	☐
B.	Do I keep enough family-expense records to know how much I spend and for what?	☐	☐
C.	Are my larger family expenditures planned in advance?	☐	☐
D.	Are my valuable papers stored in a safe deposit box in a bank?	☐	☐
E.	Do I and my spouse have a will or wills that make provision for the disposition of our farm business?	☐	☐

ASSIGNMENT SHEET #1

Do I Take Every Reasonable Step in Developing Mutual Understanding and Trust with My Lender?		Yes	No
A.	Do I understand that my lender has legal and institutional lending limitations and responsibilities to depositors, stockholders, and governmental examiners?	☐	☐
	(NOTE: The first step in mutual understanding is for each to be sympathetic to the other's problems, desires, and limitations.)		
B.	Do I and my spouse consult our lender together when negotiating a loan?	☐	☐
	(NOTE: Couples who share in major management decisions are considered better credit risks.)		
C.	Do I seek and respect my lender's counsel on important decisions?	☐	☐
D.	Do I keep the lender fully informed about other debts, and my progress or problems?	☐	☐
	(NOTE: In effect, do you give your lender the full story?)		
E.	Do I have a credit "home"?	☐	☐
	(NOTE: You should not run up accounts and debts all over town so that the lender will wonder how sound your loans really are.)		
F.	Do I understand the terms and obligations of the credit contract or note?	☐	☐
G.	Do I respect due dates on notes and mortgages?	☐	☐
H.	When repayment is difficult or impossible, do I see the lender in advance of the due date and not wait until the lender seeks me out because of delinquency?	☐	☐

Do I Provide the Lender with Needed Facts About My Business?		Yes	No
A.	Do I use net worth statements periodically to show my real financial progress?	☐	☐
B.	Do I budget expected incomes and expenses by months for each year?	☐	☐
C.	Does my lender have an estimate of total credit needs and repayment plans for the entire year?	☐	☐
	(NOTE: Your estimates will not be perfect, but they are better than a wild guess.)		
D.	Do I support each loan request by a budget of expected incomes and expenses for that particular loan purpose?	☐	☐
E.	Have I used my records to show strong and weak parts of my busiess? To analyze costs? To determine cause of low income?	☐	☐
F.	Do I have and use records for forecasting feed requirements, yields, costs, and so on?	☐	☐

ASSIGNMENT SHEET #1

		Yes	No
G.	Do I keep special records on my "bread and butter" enterprise? (NOTE: A well-managed expansive enterprise in which you are particularly skilled and for which your farm is ideally suited, may be advantageous. By furnishing detailed records, it may be easier to gain your lender's confidence so that a more liberal lending policy can be pursued.)	☐	☐

	Do I Act Like a Businessman and Use Progressive Farming Methods?	Yes	No
A.	Do I keep fully informed about improved techniques and make (not put off) needed adjustments?	☐	☐
B.	Do I farm enterprises in which the lender can develop confidence?	☐	☐
C.	Do I devote adequate time to management?	☐	☐
D.	Am I willing to use (but not abuse) credit just as any other productive tool in achieving needed size and efficiency in the farm business?	☐	☐

FARM CREDIT
UNIT VIII

ASSIGNMENT SHEET #2 — CALCULATE INTEREST EXPENSE

NAME ____ SCORE ________________

Use of borrowed capital by farmers and ranchers has been increasing rapidly in recent years. Because the increased use of credit makes decisions more risky, planning and analysis become increasingly important.

There are many types of loans and financing arrangements. In spite of Truth-in-Lending legislation, a borrower should know how to estimate the true annual rate of interest of a loan.

Calculate the interest expense for each method of computing interest. Estimate the true annual rate of interest, using the following formula:

$$\begin{array}{c}\text{Estimated}\\ \text{True Annual}\\ \text{Rate of}\\ \text{Interest}\end{array} = \frac{\text{Total of Finance Charges}}{\frac{1}{2}\text{ Original Loan}} \times \frac{\text{No. of Payments}}{\text{No. of Years}} \times \frac{1}{\text{No. of Payments Plus 1}}$$

PART I — Simple Interest Method

Simple interest is calculated by multiplying the amount of money borrowed (the principal) times the contractual interest rate times the length of time (in years or fractions thereof) the money is used.

EXAMPLE: Loan of $1,000 for one year at 9 percent interest rate

$1,000 × 0.09 × 1 = $90.00 interest

A. How much interest would be paid for the use of $2,300 for six months at 18 percent interest rate?__________________

B. How much interest would be paid for the use of $3,600 for nine months at 15 percent interest rate?__________________

C. What is the estimated true annual interest rate for problem B?__________________

ASSIGNMENT SHEET #2

PART II — Remaining Balance Method

(NOTE: Remaining balance method is used on many operating loans and may be used on loans with constant principal payments or constant payments. These loans are commonly known as *amortized loans.*)

Calculate interest on the unpaid balance by adding a given payment amount to the interest figured on the amount actually owed in any given time.

EXAMPLE: To figure interest at 1 percent per month on the unpaid balance of a $100 loan to be paid in 12 monthly payments

- Divide $100 by 12. This gives $8.33, the amount you pay on the principal each month.
- Figure the interest on $100 at 1 percent. This is $1.00. The first month you will pay $8.33 plus interest, a total of $9.33.
- Each month subtract $8.33 from the principal left at the end of the previous month. In our example for the first month: $100.00 – $8.33 = $91.67.
- Figure the interest on $91.67 at 1 percent. This is $0.92 . The second month you will pay $8.33 plus the $0.92 interest, a total of $9.25. The payment is figured this same way for each month.

(NOTE: Interest on the unpaid balance is sometimes referred to as *constant principal payments.*)

A. Assume that you purchased an irrigation system for $70,000. You paid 10 percent down and financed the remainder over ten years at 12 percent interest. You plan to make ten annual payments. How much interest will you pay over the ten-year period?

Interest paid = ______________________________

Repayment Schedule				Unpaid Balance
Year	Total Payment	Interest	Principal	
Beginning	XXXX	XXXXX	XXXXXX	$63,000
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
Totals				

ASSIGNMENT SHEET #2

B. What is the estimated true annual interest rate for problem A?

Estimated true annual interest rate = ______________________________

For a constant payment loan, calculate interest on the remaining balance by determining the loan balance, the number of periods to be repaid, and the interest rate, using an amortization table. (See next page.)

EXAMPLE: Assume that you purchased a moldboard plow for $5,000 and financed the entire amount at 15 percent interest with five annual payments.

- Using the amortization table provided on the next page, follow down the year column to the number 5. Move across the table on the year 5 line until the 15 percent column is reached. Record the decimal number (.2983).
- Multiply the decimal number (.2983) times the amount of the loan ($5,000). The result ($1491.50) is the annual payment.
- Multiply the annual payment ($1491.50) times the number of annual payments (5) to determine the total amount paid ($7457.50).
- Subtract the amount of the loan ($5,000) from the total amount paid ($7457.50) to determine the total interest paid ($2457.50).

ASSIGNMENT SHEET #2

Annual Payment per $1 of Loan at Given Interest Rates and Maturities (Amortization Table)

Year	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	1.0400	1.0500	1.0600	1.0700	1.0800	1.0900	1.1000	1.1100	1.1200	1.1300	1.1400	1.1500	1.1600	1.1700	1.1800	1.1900	1.2000
2	.5301	.5378	.5454	.5530	.5607	.5684	.5761	.5839	.5916	.5994	.6072	.6151	.6229	.6308	.6387	.6466	.6545
3	.3603	.3672	.3741	.3810	.3880	.3950	.4021	.4092	.4163	.4235	.4307	.4379	.4452	.4525	.4599	.4673	.4747
4	.2754	.2820	.2885	.2952	.3019	.3086	.3154	.3223	.3292	.3361	.3432	.3502	.3573	.3645	.3717	.3789	.3862
5	.2246	.2309	.2373	.2438	.2504	.2570	.2637	.2705	.2774	.2843	.2912	.2983	.3054	.3125	.3197	.3270	.3343
6	.1907	.1970	.2033	.2097	.2163	.2229	.2296	.2363	.2432	.2501	.2571	.2642	.2713	.2786	.2859	.2932	.3007
7	.1666	.1728	.1791	.1855	.1920	.1986	.2054	.2122	.2191	.2261	.2331	.2403	.2476	.2549	.2623	.2698	.2774
8	.1485	.1547	.1610	.1674	.1740	.1806	.1874	.1943	.2013	.2083	.2155	.2228	.2302	.2376	.2452	.2528	.2606
9	.1344	.1406	.1470	.1534	.1600	.1667	.1736	.1806	1876	.1948	.2021	.2095	.2170	.2246	.2323	.2401	.2480
10	.1232	.1295	.1358	.1423	.1490	.1558	.1627	.1698	.1769	.1842	.1917	.1992	.2069	.2146	.2225	.2304	.2385
11	.1141	.1203	.1267	.1333	.1400	.1469	.1539	.1611	.1684	.1758	.1833	.1910	.1988	.2067	.2147	.2228	.2311
12	.1065	.1128	.1192	.1259	.1326	.1396	.1467	.1540	.1614	.1689	.1766	.1844	.1924	.2004	.2086	.2168	.2252
13	.1001	.1064	.1129	.1196	.1265	.1335	.1407	.1481	.1556	.1633	.1711	.1791	.1871	.1953	.2036	.2121	.2206
14	.0946	.1010	.1075	.1143	.1212	.1284	.1357	.1432	.1508	.1586	.1666	.1746	.1828	.1912	.1996	.2082	.2168
15	.0899	.0963	.1029	.1097	.1168	.1240	.1314	.1390	.1468	.1547	.1628	.1710	.1793	.1878	.1964	.2050	.2138
16	.0858	.0922	.0989	.1058	.1129	.1203	.1278	.1355	.1433	.1514	.1596	.1670	.1764	.1850	.1937	.2025	.2114
17	.0821	.0886	.0954	.1024	.1096	.1170	.1246	.1324	.1404	.1486	.1569	.1653	.1739	.1826	.1914	.2004	.2094
18	.0789	.0855	.0923	.0994	.1067	.1142	.1219	.1298	.1379	.1462	.1546	.1631	.1718	.1807	.1896	.1986	.2078
19	.0761	.0827	.0896	.0967	.1041	.1117	.1195	.1275	.1357	.1441	.1526	.1613	.1701	.1790	.1881	.1972	.2064
20	.0735	.0802	.0871	.0943	.1018	.1095	.1174	.1255	.1338	.1423	.1509	.1597	.1686	.1776	.1862	.1960	.2053
25	.0640	.0709	.0782	.0858	.0936	.1018	.1101	.1187	.1275	.1364	.1454	.1546	.1640	.1734	.1829	.1924	.2021
30	.0578	.0650	.0726	.0805	.0888	.0973	.1060	.1150	.1241	.1334	.1428	.1523	.1618	.1715	.1812	.1910	.2008
35	.0535	.0610	.0689	.0772	.0858	.0946	.1036	.1129	.1223	.1318	.1414	.1511	.1608	.1707	.1805	.1904	.2003
40	.0505	.0505	.0664	.0750	.0838	.0929	.1022	.1117	.1213	.1309	.1407	.1506	.1604	.1703	.1802	.1901	.2001

ASSIGNMENT SHEET #2

C. Assume you purchased an irrigation system for $70,000. You paid 10 percent down and financed the remainder over ten years at 12 percent interest. You plan to make ten annual payments. Using the amortization table, calculate the following:

1. Annual payments =
2. Total of payments paid =
3. Total interest paid =

D. What is the estimated true annual interest rate for problem C above?

Estimated true annual interest rate =

E. How does the interest on the unpaid balance (constant principal payment) compare with the constant payment in the purchase and financing of the irrigation equipment?

PART III — Add-on Interest Method

Add-on interest is determined by adding the interest to the loan and dividing by the total number of payments to obtain the amount of each installment.

EXAMPLE: You borrow $100 at 15 percent interest to be paid back in twelve monthly installments.

- Multiply the loan amount ($100) by the interest rate (15 percent). The interest is $15.
- Add the interest ($15) to the loan amount ($100) to give total payments ($115). Divide the total payments ($115) by the number of monthly installments (twelve) to determine the amount of each installment ($9.58).

(NOTE: Estimated true annual rate of interest is 27.69 percent. You pay interest on money you already paid back.)

A. Assume that you have purchased a new refrigerator for your home. The total purchase cost of $1,150 was financed by the appliance dealer at 9 percent annual interest to be paid back in thirty-six monthly installments. Using the add-on method, determine the amount of each installment.

Amount of each installment =

ASSIGNMENT SHEET #2

B. What is the estimated true annual interest rate for problem A?

Estimated true annual interest rate = ____________________

PART IV — Discount Interest Method

Discount interest is calculated by subtracting the interest from the loan amount, with the borrower receiving the difference.

EXAMPLE: You borrow $100 for one year at a 6 percent discount rate. You would receive $94.00 ($100 - $6 interest). You repay $100.

(NOTE: Estimated true annual rate of interest is 6.38 percent. The $94.00 is considered to be the original amount of the unit.)

A. Your child has decided to go to college and has qualified for a student guaranteed loan. The loan will be for $3,600 at a 9 percent discount rate. How much would your child receive of the loan proceeds if the loan was to be repaid in one year?

Amount received = ____________________

B. What is the estimated true annual interest rate for problem A?

Estimated true annual interest rate = ____________________

FARM CREDIT
UNIT VIII

ASSIGNMENT SHEET #3 — COMPARE FINANCING METHODS

NAME ______________________________ SCORE ______________

What is economically feasible for one farm business may not be at all feasible for another. Farmers and ranchers must consider their particular financial circumstances, as well as the capacity of existing resources and proposed additions, in determining the soundness of proposed financial commitments.

Once a farm family determines credit needs and understands the factors that influence the cost of a loan, they are ready to choose a lender and arrange financing.

A local farmer is considering buying a tractor. The tractor may be purchased for $55,000. The farmer may finance the tractor in one of three ways:

- Dealer financed, the terms are a five-year loan with equal annual payments, and interest at 10 percent figured by the add-on method. No interest would be charged for the first year.
- Bank financed, the terms are a five-year loan with constant annual principal payments, and interest at 12 percent figured by the remaining balance method.
- Bank financed, the terms are a five-year loan with constant annual payments, and interest at 12 percent.

(NOTE: Use amortization table on the next page.)

ASSIGNMENT SHEET #3

Annual Payment per $1 of Loan at Given Interest Rates and Maturities (Amortization Table)

Year	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	1.0400	1.0500	1.0600	1.0700	1.0800	1.0900	1.1000	1.1100	1.1200	1.1300	1.1400	1.1500	1.1600	1.1700	1.1800	1.1900	1.2000
2	.5301	.5378	.5454	.5530	.5607	.5684	.5761	.5839	.5916	.5994	.6072	.6151	.6229	.6308	.6387	.6466	.6545
3	.3603	.3672	.3741	.3810	.3880	.3950	.4021	.4092	.4163	.4235	.4307	.4379	.4452	.4525	.4599	.4673	.4747
4	.2754	.2820	.2885	.2952	.3019	.3086	.3154	.3223	.3292	.3361	.3432	.3502	.3573	.3645	.3717	.3789	.3862
5	.2246	.2309	.2373	.2438	.2504	.2570	.2637	.2705	.2774	.2843	.2912	.2983	.3054	.3125	.3197	.3270	.3343
6	.1907	.1970	.2033	.2097	.2163	.2229	.2296	.2363	.2432	.2501	.2571	.2642	.2713	.2786	.2859	.2932	.3007
7	.1666	.1728	.1791	.1855	.1920	.1986	.2054	.2122	.2191	.2261	.2331	.2403	.2476	.2549	.2623	.2698	.2774
8	.1485	.1547	.1610	.1674	.1740	.1806	.1874	.1943	.2013	.2083	.2155	.2228	.2302	.2376	.2452	.2528	.2606
9	.1344	.1406	.1470	.1534	.1600	.1667	.1736	.1806	1876	.1948	.2021	.2095	.2170	.2246	.2323	.2401	.2480
10	.1232	.1295	.1358	.1423	.1490	.1558	.1627	.1698	.1769	.1842	.1917	.1992	.2069	.2146	.2225	.2304	.2385
11	.1141	.1203	.1267	.1333	.1400	.1469	.1539	.1611	.1684	.1758	.1833	.1910	.1988	.2067	.2147	.2228	.2311
12	.1065	.1128	.1192	.1259	.1326	.1396	.1467	.1540	.1614	.1689	.1766	.1844	.1924	.2004	.2086	.2168	.2252
13	.1001	.1064	.1129	.1196	.1265	.1335	.1407	.1481	.1556	.1633	.1711	.1791	.1871	.1953	.2036	.2121	.2206
14	.0946	.1010	.1075	.1143	.1212	.1284	.1357	.1432	.1508	.1586	.1666	.1746	.1828	.1912	.1998	.2082	.2168
15	.0899	.0963	.1029	.1097	.1168	.1240	.1314	.1390	.1468	.1547	.1628	.1710	.1793	.1878	.1964	.2050	.2138
16	.0858	.0922	.0989	.1058	.1129	.1203	.1278	.1355	.1433	.1514	.1596	.1679	.1764	.1850	.1937	.2025	.2114
17	.0821	.0886	.0954	.1024	.1096	.1170	.1246	.1324	.1404	.1486	.1569	.1653	.1739	.1826	.1914	.2004	.2094
18	.0789	.0855	.0923	.0994	.1067	.1142	.1219	.1298	.1379	.1462	.1546	.1631	.1718	.1807	.1896	.1986	.2078
19	.0761	.0827	.0896	.0967	.1041	.1117	.1195	.1275	.1357	.1441	.1526	.1613	.1701	.1790	.1881	.1972	.2064
20	.0736	.0802	.0871	.0943	.1018	.1095	.1174	.1255	.1338	.1423	.1509	.1597	.1686	.1776	.1862	.1960	.2053
25	.0640	.0709	.0782	.0858	.0936	.1018	.1101	.1187	.1275	.1364	.1454	.1546	.1640	.1734	.1829	.1924	.2021
30	.0578	.0650	.0726	.0805	.0888	.0973	.1060	.1150	.1241	.1334	.1428	.1523	.1618	.1715	.1812	.1910	.2008
35	.0535	.0610	.0689	.0772	.0858	.0946	.1036	.1129	.1223	.1318	.1414	.1511	.1608	.1707	.1805	.1904	.2003
40	.0505	.0505	.0664	.0750	.0838	.0929	.1022	.1117	.1213	.1309	.1407	.1506	.1604	.1703	.1802	.1901	.2001

ASSIGNMENT SHEET #3

A. Which method of financing would this farmer choose if there were no limit on the amount of the annual payment? Why?

B. Assuming that the farmer could afford to pay a maximum of $15,500 the first year, which method would be chosen? Why?

FARM CREDIT
UNIT VIII

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1 — Evaluated to the satisfaction of the instructor

Assignment Sheet #2

PART I

A. $\$2300 \times 0.18 \times {}^{6}/_{12} = \$207$

B. $\$3600 \times 0.15 \times {}^{9}/_{12} = \$405$

C. $$\frac{\$405}{\$1800} \times \frac{1}{0.75} \times \frac{1}{2} = 0.15 \text{ or } 15\%$$

PART II

A. $41,580

Repayment Schedule					Unpaid Balance
Year	Total Payment	Interest	Principal		
Beginning	XXXX	XXXXX	XXXXXX		63,000
1	13,860	7,560	6,300		56,700
2	13,104	6,804	6,300		50,400
3	12,348	6,048	6,300		44,100
4	11,592	5,292	6,300		37,800
5	10,836	4,536	6,300		31,500
6	10,080	3,780	6,300		25,200
7	9,324	3,024	6,300		18,900
8	8,568	2,268	6,300		12,600
9	7,812	1,512	6,300		6,300
10	7,056	756	6,300		-0-
Totals	104,580	41,580	63,000		XXXXX

B. $$\frac{\$41{,}580}{\$31{,}500} \times \frac{10}{10} \times \frac{1}{11} = 0.12 \text{ or } 12\%$$

ANSWERS TO ASSIGNMENT SHEETS

C. 1. Annual payments = .1769 × $63,000 = $11,144.70

Total payments paid = $11,144.70 × 10 years = $111,447.00

Total interest paid = $111,447.00 − $63,000 = $48,447.00

D. Estimated true annual interest rate $= \frac{\$48{,}447}{\$31{,}500} \times \frac{10}{10} \times \frac{1}{11}$

$= 0.1398$ or 13.98%

E. Constant principal payment has higher payments in beginning years ($13,860 to $11,144.70); lower payments in the closing year ($7056 to $11,144.70); lower amount of total interest paid ($41,580 to $48,447)

PART III

A. Amount of each installment = $40.57

$1150	loan	$1150.00	loan
× .09	interest rate	+ 310.50	total interest
$103.50	annual interest	$1460.50	
× 3	years		
$310.50	total interest	$\frac{\$1460.50}{36}$	= $40.57 monthly installments

B. Estimated true annual interest rate $= \frac{\$310.50}{\$575} \times \frac{36}{3} \times \frac{1}{37}$

$= 0.175$ or 17.5%

PART IV

A. Amount received = $3276

$ 3600	loan	$3600	loan
× .09	interest rate	− 324	interest
$324.00	interest	$3276	loan proceeds to child

B. Estimated true annual interest rate $= \frac{\$324}{\$1638} \times \frac{1}{1} \times \frac{1}{2}$

$= 0.0989$ or 9.89%

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #3

A. Remaining balance method at 12 percent with a constant principal payment would be chosen because less interest would be paid.

B. Constant annual payments would be chosen over the add-on method because less interest would be paid. The remaining balance method could not be considered because the first-year payment exceeded $15,500.

(NOTE: The following calculations were used to arrive at each answer.)

- Dealer financed — Add-on at 10% interest rate

$55,000 Loan
× .10 Interest rate
5,500
× 4 Years (1st year interest free)
$22,000 Total interest

$55,000 Loan
+22,000 Total interest
$77,000 Total payment

$77,000 ÷ 5 equal payments = $15,400 annual payments

$\frac{22,000}{27,500} \times \frac{5}{5} \times \frac{1}{6} =$ 13.3% Estimated true annual rate of interest

- Bank financed — Constant principal payments at 12% interest rate

Repayment Schedule				
Period	Total Payment	Interest	Principal	Unpaid Balance
Beginning				$55,000
1	$ 17,600	$ 6,600	$ 11,000	44,000
2	16,280	5,280	11,000	33,000
3	14 960	3,960	11,000	22,000
4	13,640	2,640	11,000	11,000
5	12,320	1,320	11,000	-0-
Totals	$ 74,800	$19,800	$ 55,000	

$\frac{\$19,800}{\$27,500} \times \frac{5}{5} \times \frac{1}{6} =$ 12.0% Estimated true annual rate of interest

ANSWERS TO ASSIGNMENT SHEETS

- Bank financed — Constant payments at 12% interest rate

$55,000 (From amortization table)
× .2774 Loan
$15,257 Annual payment
× 5 Years
$76,285 Total payments
−55,000 Loan
$21,285 Total interest paid

$$\frac{21{,}285}{27{,}500} \times \frac{5}{5} \times \frac{1}{6} = 12.9\%$$ Estimated true annual rate of interest

FARM CREDIT
UNIT VIII

TEST

NAME ______________________________ SCORE ______________

1. Match terms associated with farm credit to their correct definitions. Write the correct numbers in the blanks. Definitions are continued on the next page.

______a. Farm business's capacity to generate sufficient cash to meet its financial obligations as they fall due

______b. Items pledged or mortgaged to secure a note

______c. Financial arrangement that provides funds to cover operating and capital expenses during a complete farming cycle, normally one year

______d. Repayment of a loan with a regular series of payments over a specified period of time

______e. Occurrence that cannot be assigned accurate odds on chances of its happening

______f. Capacity to borrow money

______g. Farm business's ability to meet long-run claims against the business

______h. Use of borrowed funds to supplement equity capital

______i. Farm business's ability to compensate for variations in expenses and income as well as judgment errors in use of credit

______j. Unfavorable occurrence that can be assigned reasonably accurate odds on chances of its happening

______k. Loans in which interest rates may be lowered or raised, depending upon the cost of money in the markets

1. Solvency
2. Variable interest rate loans
3. Credit
4. Uncertainty
5. Amortization
6. Collateral
7. Financial leverage
8. Line of credit
9. Prime interest rate
10. Risk
11. Liquidity
12. Annual Percentage Rate (APR)
13. Risk-bearing ability
14. Base rate

TEST

______l. Going rate charged by lender for short-term loans to best credit risks

______m. Total finance charge on a loan expressed as an annual interest rate based upon compound interest tables

______n. Interest rate charged by lender that covers cost of money plus a reasonable profit

2. Name three resources used in farm production.

a. ____

b. ____

c. ____

3. Name four reasons for an increased emphasis on farm financial planning.

a. ____

b. ____

c. ____

d. ____

4. Select from the following list guidelines for planning a farm money-management program. Write an "X" in the blank before each correct answer.

______a. Minimize after-tax income

______b. Consider family values by listing farm business and family goals

______c. Figure net worth at a given time

______d. Refer to cash-flow plan when budgeting day-to-day needs and wants

______e. Figure depreciation allowances and investment credit

______f. Plan for emergencies and protect against loss and hazards

______g. Identify sources of income

______h. Acquire credit for use in enterprises that yield at least the cost of credit

______i. Reduce family living expenses

______j. Check and reevaluate plans periodically

TEST

5. Name three factors that increase borrowing capacity.

a. ____________________

b. ____________________

c. ____________________

6. Select from the following list guidelines for building and maintaining a good credit rating. Write an "X" in the blank before each correct answer.

_____a. Establish a credit rating

_____b. Obtain credit from specialists

_____c. Never express repayment intentions with lender

_____d. Use the right type of credit

_____e. Plan ahead for credit needs

_____f. Use short-term credit for all capital purchases

_____g. Borrow to make or save money

_____h. Plan the use of loan funds with the lender

_____i. Work out a repayment plan for every loan

_____j. Obtain credit from a nonagricultural lender

_____k. Meet payments when due

_____l. Borrow maximum amount of money that lender will loan

_____m. Avoid accumulating debts in several places

_____n. Take an annual inventory

7. Name the four *C's* of credit.

a. ____________________

b. ____________________

c. ____________________

d. ____________________

TEST

8. Select from the following list characteristics a borrower looks for in a lender. Write an "X" in the blank before each correct answer.

_____a. Managerial ability

_____b. Character (reputation)

_____c. Lender's policies

_____d. Permanence and dependability

_____e. Ability to repay

_____f. Knowledge of agriculture

_____g. Cost of credit

9. Select from the following list clues to dependability of an agricultural lender. Write an "X" in the blank before each correct answer.

_____a. Does not understand farming, but can fund the farming operation

_____b. Is small and is not always capable of handling peak credit periods

_____c. Makes loans to farmers or ranchers a major source of business

_____d. Sticks with progressive and responsible farmers and ranchers through bad times, as well as good

_____e. Has rigid repayment schedules

_____f. Understands farming and ranching and the various credit needs

_____g. Is capable of handling a growing business loan through peak need periods

_____h. Is willing to fit the repayment of your loan to your specific situation, and will renew your loan if it is logical to do so

_____i. Sticks with progressive and responsible farmers and ranchers only during good times

_____j. Has a reputation for honesty, integrity, and fairness

TEST

10. Name five characteristics a lender looks for in a borrower.

a. ____________________

b. ____________________

c. ____________________

d. ____________________

e. ____________________

11. Name four conditions that indicate good repayment ability.

a. ____________________

b. ____________________

c. ____________________

d. ____________________

12. Select from the following list conditions that indicate poor repayment ability. Write an "X" in the blank before each correct answer.

_____a. Small business yielding a low gross income

_____b. Low production per unit

_____c. Efficient production or high yield per unit

_____d. Low price per unit sold

_____e. Low cash production costs per unit of production

_____f. High cash production costs per unit of production

_____g. High cash overhead costs per unit of production

_____h. Unforeseen cash living costs

_____i. Low cash overhead costs per unit of production

_____j. Borrowing above ability to repay

_____k. Overestimating amount of loan that can be repaid each year

_____l. Unplanned purchases or expenses

TEST

13. Distinguish among stages of the farm-firm life cycle. Write an "E" for establishment, an "EX" for expansion, a "C" for consolidation, and a "T" for transfer.

_____a. Capital accumulation and growth may be a low priority; cooperator appears to have control of farm firm and is probably in strongest financial position; cooperator's attention will likely turn to such factors as debt-free ownership, stability, and maintenance of income; cooperator will have less need for borrowed funds; cooperator may have increased managerial maturity

_____b. Capital constraints may be quite severe; financial management and production ability are unproven; main objective appears to be the development of a viable organization and control of sufficient resources to nurture future growth

_____c. Cooperator may be relatively long on experience and capital; cooperator may be short on energy and length-of-planning horizon; retirement income and inflation protection become important; cooperator is interested in transferring assets in an equitable fashion and at a minimum cost to heirs; cooperator may want to preserve management continuity and production efficiency as the business is transferred to new management

_____d. Cooperator is typically young, long on energy, and probably willing to assume a few risks; typical cooperator seeks to utilize management capacity more fully; cooperator seeks economic security; cooperator wants a competitive position in the industry

14. Name five factors to consider in choosing a source of credit.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

15. Name factors that determine credit charges.

a. ______________________________

b. ______________________________

c. ______________________________

TEST

16. Match classifications of credit to their correct definitions. Write the correct numbers in the blanks.

______a. Will generally return its original cost plus an amount for interest and profit

______b. Is for personal use rather than for a use that will generate future income

1. Production credit
2. Consumption credit

17. Distinguish among characteristics of different types of loans. Write an "S" for short-term loans, an "I" for intermediate-term loans, and an "L" for long-term loans.

______a. Extend for periods from one to ten years

______b. Are used for real estate purchases and refinancing other loans

______c. Are used for current operating expenses and for payment of nonfarm cash expenses

______d. Extend for periods over ten years

______e. Extend for periods up to one year

______f. Are used for purchase or repair of depreciable assets

18. Identify sources of farm credit. Write the correct names in the blanks.

Commercial banks
Individuals
Finance companies
Federal Land Bank Association
Production Credit Association
Farmers Home Administration
Insurance companies
Merchants and dealers
Oklahoma Commissioners of the Land Office (School Land Commission)

Provide long-term mortgages; provide low interest rates; have no upper limits on size of loan made; make loans only in selected areas; forbid repayment of loan in one payment

a. ____

Makes loans, except for emergency loans, available to individuals who do not qualify for other types of loans; provides loan terms ranging from short-term to long-term; provides reasonable rates and terms for repayment; may provide advice, assistance, and supervision from county supervisor; makes special loans to youth; requires that records be kept; is not intended as permanent source of financing

b. ____

TEST

May offer low rate of interest; provide immediate loan availability; provide good possibilities for negotiating amount of payment and interest rate; may make land purchase loans; offer possibility for seller of land to spread income from sale of land over a period of time; may not be dependable

c. ______________________________

State law and legislative action affect loan terms, maximum amounts, and interest rates; provides reasonable interest rates; makes long-term loans; makes loans to farmers; puts loan limitations on appraised agricultural value

d. ______________________________

Usually provides favorable interest rates on long-term loans; provides long-term loans ranging from twenty to forty years; considers economic conditions in loan process; requires complicated procedures for loan application; requires that borrower buy shares; may have limited amount of funds available for loan

e. ______________________________

Make loans available for poor-risk borrowers; generally provide immediate loan approval; usually offer only short-term credit; charge extremely high interest rates; may use high-pressure sales technique on borrower; charge high closing fees

f. ______________________________

Provide loans for poor-risk borrowers; are conveniently located for farmers; provide immediate loan availability; make loans for large percentage of appraised value; usually design repayment schedule for needs of borrower; have wide range of interest rates and terms

g. ______________________________

Make borrowing convenient; consider personal needs; approve loans quickly; make loans for a diversity of items; make character loans; have widely varied interest rates; usually offer only short-term credit; usually have limited loan amounts available for land purchases

h. ______________________________

Offers variable interest rates; has unlimited amount of funds available for loan; allows interest to be paid only for length of time money is used; requires that records be kept; requires that borrower buy shares; requires that loans be renewed annually; may be inconveniently located

i. ______________________________

TEST

19. Match methods of computing interest to their correct definitions. Write the correct numbers in the blanks.

______a. Interest paid for borrowing money that is repaid in a single lump sum; calculated by multiplying sum borrowed by interest rate times time period of loan

______b. Interest calculated by multiplying outstanding principal by contractual rate for period in question

______c. Interest based on original loan for entire period of loan; the sum of total interest and principal is divided by number of payments to obtain amount of each installment

______d. Interest calculated on original amount of loan for full period of loan; this amount, plus any other loan costs, is subtracted from amount of loan at the beginning, with borrower receiving the difference

1. Discount
2. Simple interest
3. Remaining balance
4. Add-on

20. Match credit instruments to their correct definitions. Write the correct numbers in the blanks. Instruments and definitions are continued on the next page.

______a. Written order authorizing the financial institution to pay stated sum of money from depositor's account to person named

______b. Written order from one party to another directing that party to pay money to a third party

______c. Written promise of borrower to repay a certain sum of money to a certain person or bearer on demand or on a specified date

______d. Legal assignment of property to a creditor as security for a debt, the assignment to be void upon completed payment of debt

______e. Written statement certifying that ownership of something has been transferred by sale

1. Bill of sale
2. Draft
3. Check
4. Mortgage
5. Promissory note

TEST

_____f. Document given by a warehouse representative for goods received for storage; evidence that the person named in the receipt has deposited a specified amount of products with representative

_____g. Form used to provide public information to the county clerk on the security for a loan

_____h. Document that spells out the rights and duties of both parties to a loan and gives the lender a security interest in the borrower's personal property, which is described therein

_____i. Written application for a loan that shows the lender how much money is wanted, for what purpose the money is to be used, and how and when the borrower plans to pay the money back

_____j. Contract or receipt signed by a common carrier; agreement to deliver the described freight to a given person at a stated place

_____k. Written agreement by one party to sell a property or a service to a second party for a stated price, and under stated conditions

6. Security agreement
7. Bill of lading
8. Financing statement
9. Loan application
10. Warehouse receipt
11. Sales contract

(NOTE: Test questions 21-23 list the assignment sheets. They are an important part of this test. If they have not been completed, check with your instructor.)

21. Determine credit standing.

22. Calculate interest expense.

23. Compare financing methods.

FARM CREDIT
UNIT VIII

ANSWERS TO TEST

1. a. 11
   b. 6
   c. 8
   d. 5
   e. 4
   f. 3
   g. 1
   h. 7
   i. 13
   j. 10
   k. 2
   l. 9
   m. 12
   n. 14

2. Answer should include any three of the following
   a. Land
   b. Labor
   c. Capital
   d. Management

3. Answer should include any four of the following
   a. Increased costs of land and capital resources
   b. Increased risk in farming and ranching
   c. Increased family living costs
   d. Increased problems with current loan repayment
   e. Increased demand for available farm loan funds
   f. Increased amount of financial information needed by agricultural lenders

4. b, c, d, f, h, j

ANSWERS TO TEST

5. Answer should include any three of the following
   - a. Good managerial ability
   - b. Sufficient repayment capacity
   - c. Increased price of commodity
   - d. Increased size of operation
   - e. Additional income

6. a, b, d, e, g, h, i, k, m, n

7. a. Character
   - b. Capacity to repay
   - c. Condition of times
   - d. Collateral

8. b, c, d, f, g

9. c, d, f, g, h, j

10. Answer should include any five of the following
    - a. Character (reputation)
    - b. Managerial ability
    - c. Financial position
    - d. Ability to repay
    - e. Purpose of loan
    - f. Security for loan

ANSWERS TO TEST

11. Answer should include any four of the following

    a. Adequate-sized business yielding a good growth income

    b. Efficient production or high yield per unit

    c. Good price per unit for product sold

    d. Low cash production cost per unit of production

    e. Low cash overhead cost per unit of production

    f. Good farm business and family management

12. a, b, d, f, g, h, j, k, l

13. a. C

    b. E

    c. T

    d. EX

14. Answer should include any five of the following

    a. Amount of loan

    b. Rate of interest

    c. Length of loan period

    d. Repayment schedule

    e. Size of payments

    f. Reliability of lending agents

    g. Additional credit charges

15. a. Cost of money in the money market

    b. Service cost of loan

    c. Risk of loss

ANSWERS TO TEST

16. a. 1

b. 2

17. a. I

b. L

c. S

d. L

e. S

f. I

18. a. Insurance companies

b. Farmers Home Administration

c. Individuals

d. Oklahoma Commissioners of the Land Office (School Land Commission)

e. Federal Land Bank Association

f. Finance companies

g. Merchants and dealers

h. Commercial banks

i. Production Credit Association

19. a. 2

b. 3

c. 4

d. 1

ANSWERS TO TEST

20.
- a. 3
- b. 2
- c. 5
- d. 4
- e. 1
- f. 10
- g. 8
- h. 6
- i. 9
- j. 7
- k. 11

21. Evaluated to the satisfaction of the instructor

22. Evaluated to the satisfaction of the instructor

23. Evaluated to the satisfaction of the instructor

PARTIAL BUDGETING
UNIT IX

UNIT OBJECTIVE

After completing this unit, the cooperator should be able to complete the decision-making process by using a partial budget. The cooperator will show this knowledge by completing the assignment sheet and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the cooperator should be able to

1. Match terms associated with partial budgeting to their correct definitions.
2. Select from a list uses of partial budgeting.
3. Distinguish between positive and negative effects of partial budgeting.
4. State benefits of partial budgeting.
5. Match components of a partial budget to their correct descriptions.
6. Arrange in order steps in the partial budgeting process.
7. Complete partial budgets.

PARTIAL BUDGETING
UNIT IX

SUGGESTED ACTIVITIES

I. Unit contents

- A. Objective sheet
- B. Suggested activities
- C. Supplements
    1. Supplement #1 — Partial Budget
    2. Supplement #2 — Application of Partial Budgeting
    3. Supplement #3 — Facts/Future
- D. Information sheet
- E. Transparency master: TM #1 — Partial Budget Form
- F. Assignment Sheet #1 — Complete Partial Budgets
- G. Answers to assignment sheet
- H. Test
- I. Answers to test

II. Instructor's guide

- A. Make transparencies or copies of supplements as appropriate.
- B. Provide cooperators with objective sheet.
- C. Discuss unit and specific objectives.
    1. Briefly review budgeting and types of budgets as discussed in Unit VI, "Enterprise Budgets."
    2. Point out that partial budgeting is a shortcut procedure that can be used to determine whether an investment or change in some portion of the farm business will be profitable. Analysis and computations are held to a minimum with partial budgeting. Only those costs and returns that change as a result of adjustments in one segment of the farm business are considered.

SUGGESTED ACTIVITIES

3. Emphasize that by using partial budgeting, cooperators can more easily compare costs and returns of alternate plans of action for their farm businesses. Stress that when entering a new operating season, even a poor plan is better than no plan.

D. Provide cooperators with information and assignment sheets.

E. Discuss information and assignment sheets.

1. When discussing Objective 1, explain the importance of defining terms for common understanding.

2. Discuss Objective 2. Emphasize that partial budgeting considers only minor changes in the farm business. Point out examples of operating costs that may change from variable to fixed costs at a given time.

3. Discuss Objective 3. Explain that the credits or positive effects from a proposed change are weighed against the debits and negative effects.

4. When discussing Objective 4, encourage cooperators to give examples of changes that could be evaluated by using partial budgeting. Emphasize that with planning, cooperators will be able to choose a course of action best suited to their farm business and family goals.

5. When discussing Objective 5, use Transparency #1 to illustrate the components of a partial budget form. Explain that negative effects are listed in the left-hand column and positive effects are listed in the right-hand column of the partial budget form. Use Supplements #1 and #2 as an aid in illustrating how partial budgeting can be used to evaluate a proposed change in the farming operation

6. Discuss Objective 6. Point out that one of the most difficult tasks is that of determining the situation to be considered. It is important to confine the situation to one change in the farming operation. Use Supplement #3, "Facts/Future," when discussing the importance of gathering pertinent information.

   Explain that generation of future unknowns, particularly future prices, is the most difficult information to predict. The cooperator must estimate yields and prices to get an idea of what returns will not be received and what returns will be received.

   a. Estimation of yield data can be obtained from several sources. Individual farm records of yields are the best sources of information. Farm records will show a history of the level of production of a crop. This history, combined with an assessment of current crop conditions, should accurately predict future yields, given normal weather and other conditions. Other

SUGGESTED ACTIVITIES

sources of yield estimates are neighboring farm histories, research reports showing average yield, and the cooperator's past experience. Combinations of all these sources should yield a close estimate of projected yields.

b. Future product prices are the most difficult elements to predict. Agricultural economists, USDA statisticians, and future markets, are just a few resources that provide information concerning the trend of prices and national crop conditions. It will be unusual to find a predicted price for a product on a particular day. Information published by these sources, as well as the cooperator's intuition, provide the best estimate of future prices for products. Perhaps a more revealing method would be to use a range of prices (low, medium, high) to evaluate changes. This method evaluates the price sensitivity of the projected change.

c. After all pertinent data has been assembled, the budget is ready to be developed. The amount of dollar cost is calculated for each of the categories. Only the costs and returns that will change by proceeding with the alternate plan are used in the partial budget. Units used to analyze the change may be any size, depending on the change.

EXAMPLES: The whole crop, one acre of the crop, one head of cattle, the entire herd of cattle

After the analysis has been performed, the result can be multiplied as needed to show the economic impact on the entire farm situation.

(NOTE: The net result will be in the same economic direction, positive or negative, regardless of how the budget is calculated.)

d. Column totals show, respectively, the negative and positive economic aspects of the proposed change. Subtract the first column total from the second column total to obtain a net amount. This net amount will reflect the change in net farm income if the proposed plan is adopted. A positive net amount indicates that from an economic standpoint it would be wise to proceed with the alternate plan. A negative amount indicates that it would not be economically profitable to proceed with the change. The cooperator's final decision should include consideration of these results, as well as consideration of pertinent elements.

e. Have cooperators complete Assignment Sheet #1 in class. You may wish to review with the cooperators *OSU Extension Fact Sheet No. 142*, "Partial Budgeting in Farm Management," before discussing Part I; *OSU Extension Fact Sheet No. 15*,

SUGGESTED ACTIVITIES

"On-Farm Versus Commercial Wheat Storage Cost," before discussing Part II; and *Doane's Agricultural Report No. 547*, "Partial Budgeting," before discussing Part III of the assignment sheet.

f. You may wish to develop more examples of partial budget situations suitable to the cooperators' communities. Have class members supply input data for these situations.

F. During on-farm instruction, have cooperator define a situation that can be solved with partial budgeting. After pertinent data has been gathered, assist the cooperator in completing a partial budget form.

G. Give test.

H. Critique test.

I. Reteach if necessary.

III. Unit references

A. Anderson, Kim, and R.E. "Gus" Page. *On-Farm Versus Commercial Wheat Storage Cost, OSU Extension Facts No. 157.* Stillwater, Oklahoma: Oklahoma State University, 1983.

B. *Doane's Agricultural Report No. 547-Partial Budgeting.* St. Louis, Missouri: Doane's Agricultural Services, Inc., 1979.

C. Hodgens, Jim, and Leland Myers. *Farm Business Management Year 1.* Stillwater, Oklahoma: Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructonal Materials Center, 1979.

D. Kuhlman, Richard H., James E. Casey, and Raleigh A. Jobes. *Partial Budgeting in Farm Management, OSU Extension Facts No. 142.* Stillwater, Oklahoma: Oklahoma State University, 1978.

E. Osburn, Donald D., and Kenneth C. Schneeberger. *Modern Agriculture Management.* Reston, Virginia: Prentice Hall Co., 1978.

SUGGESTED ACTIVITIES

SUPPLEMENT #1

PARTIAL BUDGET

SITUATION: Leave stockers on wheat pasture from March 1 to May 15 rather than remove stockers and combine wheat.

ADDITIONAL COSTS [1]		**ADDITIONAL RETURNS**	
Interest in investment	$ 1.87	Added return if stockers are kept to May 1	$62.79
veterinarian costs	$ 3.15		
Salt and minerals	$ 1.14		
Labor	$ 3.39		
Subtotal	$ 9.55		

REDUCED RETURNS		**REDUCED COSTS**	
Wheat production 32 bushels at $3.33/Bu	$106.56	Custom combining	$ 8.00
		Custom hauling $0.10/Bu	$ 3.20
Subtotal	$106.56	Subtotal	$11.20

A. TOTAL ADDITIONAL COSTS AND REDUCED RETURNS	$116.11	B. TOTAL ADDITIONAL RETURNS AND REDUCED COSTS	$73.99
		NET CHANGE IN INCOME (B MINUS A)	–$42.12

---

[1] Estimates are based on actual data from representative budgets from southwestern Oklahoma (Enterprise budgets numbers #13601336 and #76700804).

SOLUTION: Remove stockers on March 1 and combine wheat as planned previously.

SUGGESTED ACTIVITIES

SUPPLEMENT #2 — APPLICATION OF PARTIAL BUDGETING

A. The decision to graze out or harvest a wheat crop would have to be made about March 1 and be used on expected yields and prices of wheat and stockers. The data on prices and yields are based on representative budgets for wheat and stockers for southwestern Oklahoma (Enterprise Budgets 13601336 and 76700804). Listed below are price and yield figures for the applicable period. This budget is done on a per-acre basis with a stocking rate from March 1 to May 15 of one steer per acre of wheat.

- Rate of gain per steer from March 1 to May 15 — 1.7 pounds per day
- Choice steers 571.25 pounds on March 1 — $70 per cwt
- Choice steers 701 pounds on May 15 — $66 per cwt
- Wheat yield — 32 bushels per acre
- Wheat price on June 1 — $3.33 per bushel
- Interest on capital (livestock) from March 1 to May 15 — $1.87 per steer
- Salt and mineral costs from March 1 to May 15 — $1.87 per steer
- Labor from March 1 to May 15 — $3.39 per steer
- Veterinary cost from March 1 to May 15 — $3.15 per steer
- Custom combining — $8 per acre
- Custom hauling — $0.10 per bushel; $3.20 per acre

1. *Additional costs* — Include costs that are incurred by keeping the steers through May 15. Four of the budget items are listed in this category. Interest expense is increased because the cattle are held two and one-half months longer; salt and mineral costs are also increased, as are labor costs and veterinary services. It is important to note that these costs are incurred only when the cattle are kept. Costs are not incurred if the cattle are sold.

2. *Reduced returns* — List value of wheat not received when grazed out. Yield and price shown are estimates based on current expectations. Column 1 total shows a figure of $116.11. This figure indicates the total negative economic impact of the proposal on the farm operation.

3. *Additional returns* — Show value of beef grown from March 1 to May 15 at a stocking rate of one steer per acre, gaining 1.7 pounds per day. The value of the steer on March 1 is subtracted from its value on May 15 to yield the dollar value of the potential gain. Listed weights are average, but the prices are actual choice steer prices in the weight range on those days.

4. *Reduced costs* — List costs of custom combining and hauling that are not incurred if the wheat is grazed out. Both rates are representative of current rates in the region. The total of Column 3 is $73.99. This figure indicates the total positive effects of the proposal.

SUGGESTED ACTIVITIES

SUPPLEMENT #2

5. *Totals* — Subtracting the total of Column 1 from the total of Column 2 equals a net value of minus $42.12. This figure indicates the economic advantage per acre of grazing out the wheat versus selling the steers on March 1 and harvesting the wheat.

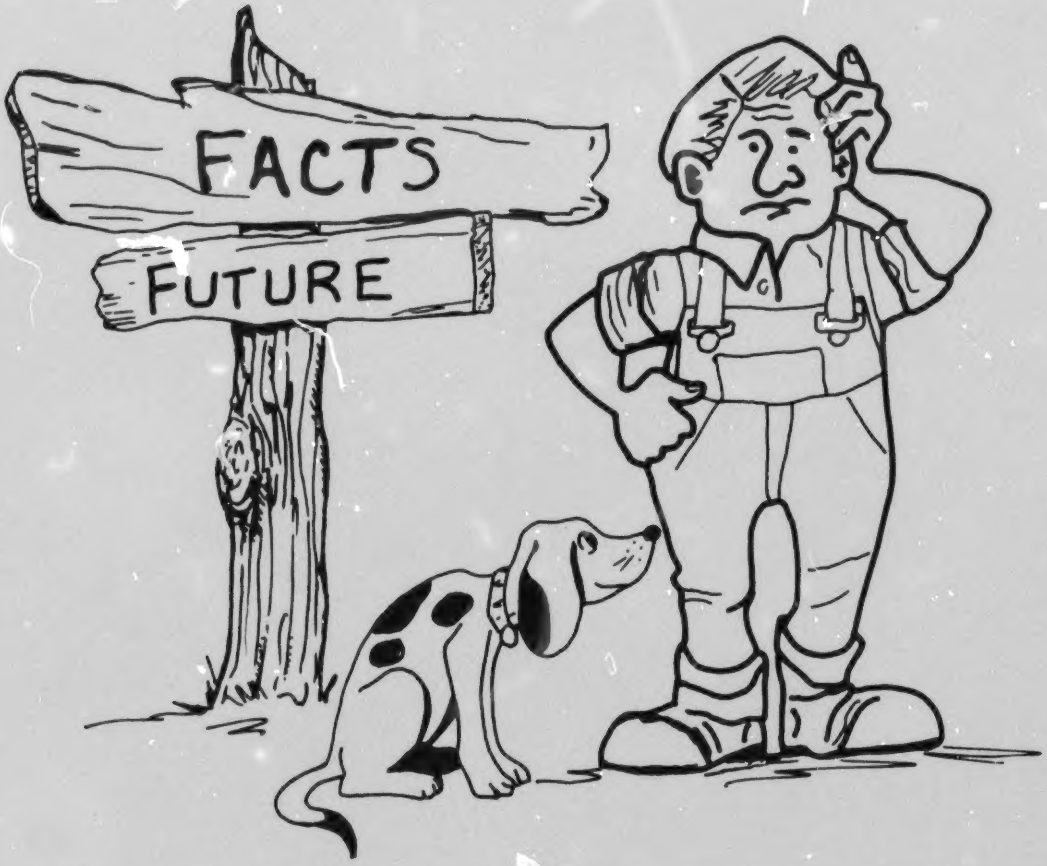
B. Reasoning behind the budget formula is simple. On or about March 1, the cooperator must decide whether to sell the stocker steers or to graze out the crop. Prices are a main determinant in this decision, and can only be estimated for the future. By combining known figures with estimates of future yields and prices, the cooperator can compare alternate plans of action for profitability.

C. Data in this example are based on representative budgets for a large production region. Individual cooperators should strive to modify estimates to more closely conform to their actual situations. Additionally, individual farmers may find some of the included costs not applicable to their situation or may find other costs that should be included. It should be reemphasized that the partial budget includes only costs that change. Costs that do not change should not be included in the analysis.

D. Partial budgeting is a simplified procedure that will aid producers in everyday decision making. This analysis is not designed for total farm planning, but rather to estimate the economic consequences of making a change in some phase of the farm operation. The partial budgeting concept is a step-by-step process for identifying all of the costs and returns that change due to alterations in the production process. Once these costs and returns are identified, they are weighed against each other to estimate the economic consequences of the change. In using this procedure, remember that the results can only be as good as the input data. Therefore, care should be taken when preparing estimates for the various categories. In addition, various levels for changing values, such as yields and prices, should be tested for their effect on the ultimate outcome.

SUGGESTED ACTIVITIES

SUPPLEMENT #3


FACTS
FUTURE

PARTIAL BUDGETING
UNIT IX

INFORMATION SHEET

I. Terms and definitions

  A. Budgeting — Systematic procedure for making decisions

  B. Partial budgeting — Process for estimating the economic effects of some change in the farm business

  C. Fixed costs — Costs incurred by the farm business that do not vary with the level of production in the short run

  D. Variable costs — Costs incurred by the farm business that change directly with the level of production because of different amounts of variable input needed at different levels of output

II. Uses of partial budgeting

  A. Estimating economic effects of adjustments on some portion of farm business

  B. Evaluating changes in uses of resources that are not fixed

  (NOTE: With partial budgeting, the cooperator assumes that many aspects of the business are fixed in the short run.)

  C. Making only necessary adjustments when a relatively small change is being considered in the business

  D. Showing only the effect on net income of a change in the business

  (NOTE: Partial budgeting is a marginal concept and does not reflect total revenue, total expenses, or which changes will most profitably use resources.)

III. Effects of partial budgeting

(NOTE: Partial budgeting is based on the principle that a small change in the organization of a farm business will have one or more of the following effects.)

  A. Positive

    1. Change will eliminate or reduce some costs

    2. Change will cause additional revenues to be incurred

INFORMATION SHEET

B. Negative

1. Change will eliminate or reduce some returns

2. Change will cause additional costs to be incurred

(NOTE: The net effect will be the sum of the positive economic effects minus the sum of the negative effects.)

IV. Benefits of partial budgeting

A. Aids in evaluating changes

EXAMPLES: Adding to an enterprise, introducing a new enterprise, changing production practices, purchasing a new machine

B. Provides a plan for the future

EXAMPLE: Comparison of costs and returns for alternate plans of action

V. Descriptions of components of a partial budget

A. Additional costs — List of additional expenses that will be incurred if the change is made

B. Reduced returns — List of returns that would no longer be received under the proposed plan

C. Total additional costs and reduced returns — Sum of total negative economic effects of making the proposed change

D. Additional returns — List of additional income that will result if the change is made

E. Reduced costs — List of estimated expenses that would no longer be incurred if the change is made

F. Total additional returns and reduced costs — Sum of total positive economic effects of making the proposed change

G. Net change in income — Total additional returns and reduced costs minus total additional costs and reduced returns

(NOTE: A positive net change in income indicates a potential increase in net returns if the change is made. Conversely, a negative net change in income indicates a potential decrease in net returns if the proposed change is made.)

INFORMATION SHEET

VI. Steps in the partial budgeting process (Assignment Sheet #1)

A. Define situation

EXAMPLES: Own combine versus custom harvest
Purchase storage facilities versus continue to store at the elevator
Graze out wheat versus combining wheat

B. Gather information about alternate solutions

EXAMPLES: Yield data, future prices, effects of timeliness

(NOTE: The value of a partial budget analysis is only as accurate as the input data.)

C. Evalute alternate solutions

EXAMPLES: Additional costs, reduced returns, additional returns, reduced costs

D. Make decision consistent with goals and objectives

E. Put decisions into effect

F. Evaluate and accept consequences

Partial Budget

SITUATION:

ADDITIONAL COSTS

ADDITIONAL RETURNS

REDUCED RETURNS

REDUCED COSTS

A. TOTAL ADDITIONAL COSTS AND REDUCED RETURNS

$ ____________

B. TOTAL ADDITIONAL RETURNS AND REDUCED COSTS

$ ____________

– $ ____________

NET CHANGE IN INCOME (B MINUS A) $ ____________

PARTIAL BUDGETING
UNIT IX

ASSIGNMENT SHEET #1 — COMPLETE PARTIAL BUDGETS

NAME ______________________________ SCORE ______________

The partial budget is ready to be developed after all pertinent data has been assembled. The amount of dollar cost that will result from making the proposed change is calculated for each of the partial budget categories. Only the costs and returns that change by proceeding with the alternate plan are analyzed in the partial budget. Column 1 and Column 2 totals show, respectively, the negative and positive economic aspects of the proposed change. Subtract the first column total from the second column total to obtain a net amount that reflects the change in net income if the proposed alternative is adopted. A positive net change indicates that, economically, it would be wise to proceed with the proposed alternate plan. A negative net change indicates that it would not be economically profitable to proceed with the change.

Remember, the value of this partial budget analysis is only as accurate as the input data.

PART I

Based on the information below, complete the partial budget form on the next page, and then answer the following questions to determine whether a producer should graze out wheat or harvest wheat for grain.

A. What strategy would you select? ______________________________

B. What would be the break-even stocker price as of mid-May? $__________/cwt

C. What would be the break-even wheat price at harvest time? $__________/bu

- The producer needs to make a decision as of mid-March.
- The producer currently does not own any steers.
- The stocker rate is three steers for two acres.
- Mid-March prices for 570-pound stockers is $67/cwt.
- Trucking the stockers will cost $3/head.
- Vet fees are estimated at $5/head.
- Sales commission is estimated at $8/head.
- Salt and mineral supplement is estimated at $1/head.
- The wheat price is estimated to be $3.50/bushel at harvest time.
- The estimated growing cost of the wheat crop to mid-March is $60/acre.
- Custom combining rate for wheat is $16/acre (includes extra bushels, etc.).
- The estimated price of 700-pound stockers in mid-May is $65/cwt.
- Assumptions include no opportunity cost or interest charged on investment, and no death loss.
- The estimated yield of the wheat crop is 35 bu/acre.

ASSIGNMENT SHEET #1

SITUATION:

ADDITIONAL COSTS

ADDITIONAL RETURNS

REDUCED RETURNS

REDUCED COSTS

A. TOTAL ADDITIONAL COSTS AND REDUCED RETURNS $__________

B. TOTAL ADDITIONAL RETURNS AND REDUCED COSTS $__________

– $__________

NET CHANGE IN INCOME (B MINUS A) $__________

ASSIGNMENT SHEET #1

PART II

Based on the information below, complete the partial budget form on the next page, and then answer the following question.

What strategy would the producer select?____

For the last ten years, Farmer Inthedell has stored grain at the local elevator until marketed. On the average, Farmer Inthedell stored wheat six months before selling it. Now he is considering setting up his own storage facilities, including a 9,000 bushel bin, an auger, and a concrete unloading pad. Assume that the following pertinent data has been assembled.

Fixed Costs

- The 9,000 bushel bin package was purchased for $9,509 or $1.06 per bushel.
- Average annual cost for interest and depreciation has been calculated at 4.5 cents per bushel.
  (NOTE: Assumptions include a bin life of twenty years, ACRS depreciation over five years and a zero salvage value after twenty years. Costs were estimated for each year of the twenty-year period. Average annual costs were then determined on a net present-value basis. The total purchase price was assumed borrowed at 15 percent interest for five years.)

Variable Costs

- Electricity - 0.2 cents per bushel
- Chemicals - 0.85 cents per bushel
- Maintenance - 3.1 cents per bushel
- Insurance - 2.6 cents per bushel
- Labor - 1.8 cents per bushel
- Shrinkage - 5.25 cents per bushel

(NOTE: Shrinkage cost was assumed at 1.4 percent of expected wheat price of $3.75 per bushel.)

- Labor and truck charges are the same for filling the bin as for delivering wheat to the elevator at harvest time.
- Labor and trucking from the bin to the elevator at time of sale is estimated at 3.0 cents per bushel.

Miscellaneous

- The price of wheat at harvest time is $3.50 per bushel and the expected price in six months is estimated to be $3.75 per bushel.
- The elevator charges 2.5 cents per bushel per month for commercial storage.
- The producer evaluates this decision before income taxes are paid.

ASSIGNMENT SHEET #1

SITUATION:

ADDITIONAL COSTS	**ADDITIONAL RETURNS**
REDUCED RETURNS	**REDUCED COSTS**

A. TOTAL ADDITIONAL COSTS AND REDUCED RETURNS $__________

B. TOTAL ADDITIONAL RETURNS AND REDUCED COSTS $__________

– $__________

NET CHANGE IN INCOME (B MINUS A) $__________

ASSIGNMENT SHEET #1

PART III

Based on the information below, complete the partial budget form on the next page and then answer the following question.

Which strategy would the farmer select?________________________________

A farmer in northcentral Oklahoma has been evaluating various changes in the farm business. One change being considered is whether to drop a five-sow, two-litter-per-year feeder pig enterprise in favor of adding ten milking cows to the dairy herd, the premise being that the farmer wants an additional $1,000 for family living in addition to a reasonable profit. The farmer has gathered the following information to aid in the decision-making process.

Added Annual Income Includes

- Sale of milk from 10 cows averaging 15,000 pounds at an average price of $11/cwt.
- Sale of two cull cows at $550 each.
- Sale of seven calves at $125 each.

Reduced Annual Costs Include

- Purchased feed for the feeder pig enterprise of $4,000.
- Supplies, electricity, death loss, insurance, taxes, etc. of feeder pig enterprise totaling $600.
- Opportunity cost of operator's labor for 120 hours at $4/hour.

New and Added Investment Costs Include

- Remodeling barn cost of $8,000. An annual charge of $1,600 for depreciation, interest, repairs, taxes, and insurance for remodeling the barn.
- 10 percent charge on investment of 10 dairy cows purchased for $1,000 each.

Added Operating Costs Include

- Purchased feed for additional cows totaling $5,200.
- Supplies, interest, machinery, electricity, taxes, etc. estimated to be $2,500.

Reduced Income Includes

- Sale of 85 feeder pigs at $45 each.
- Sale of two cull sows at $160 each.

(NOTE: Consideration was not given to possible income tax management consequences.)

ASSIGNMENT SHEET #1

SITUATION:

ADDITIONAL COSTS

ADDITIONAL RETURNS

REDUCED RETURNS

REDUCED COSTS

A. TOTAL ADDITIONAL COSTS AND REDUCED RETURNS $__________

B. TOTAL ADDITIONAL RETURNS AND REDUCED COSTS $__________

– $__________

NET CHANGE IN INCOME (B MINUS A) $__________

PARTIAL BUDGETING
UNIT IX

ANSWERS TO ASSIGNMENT SHEET

Assignment Sheet #1

PART I

See partial budget form on following page

A. Harvest wheat for grain

B. $P_s \times Y_s - OC_s = NR_w$

$P_s \times {}^3/_2 \times 700 - \$598.35 = \$122.50 - \$16.00$

$$P_s = \frac{\$598.35 + \$106.50}{700} \times {}^2/_3 \times 100 = \$67.13/\text{cwt}$$

C. $P_w \times Y_w - OC_w = NR_s$

$P_w \times 35 - \$16.00 = \$682.50 - \$598.35$

$$P_w = \frac{\$16.00 + \$84.15}{35} = \$2.86/\text{bu}$$

PART II

See partial budget form on following page

Continue to store wheat at elevator

PART III

See partial budget form on following page

Add ten milking cows to herd and drop feeder pig enterprise

ANSWERS TO ASSIGNMENT SHEET

PART I

SITUATION: Graze out wheat versus harvest wheat for grain (per acre basis)

ADDITIONAL COSTS

570 lb stockers @ $67/cwt = $381.90 × $^{3}/_{2}$ =	$572.85
Trucking @ $3/hd = $3 × $^{3}/_{2}$ =	$ 4.50
Vet fees @ $5/hd = $5 × $^{3}/_{2}$ =	$ 7.50
Sales commission @ $8/hd = $8 × $^{3}/_{2}$ =	$ 12.00
Salt and mineral @ $1/hd = $1 × $^{3}/_{2}$ =	$ 1.50
	$598.35/acre

ADDITIONAL RETURNS

700 lb stockers @ $65/cwt = $455 × $^{3}/_{2}$ =	$682.50/acre

REDUCED RETURNS

Estimated wheat production = 35 bu @$3.50/bu =	$122.50/acre

REDUCED COSTS

Custom combining =	$ 16.00/acre

A. TOTAL ADDITIONAL COSTS AND REDUCED RETURNS

$720.85

B. TOTAL ADDITIONAL RETURNS AND REDUCED COSTS

$ 698.50
− 720.85

NET CHANGE IN INCOME (B MINUS A) $ − 22.35

ANSWERS TO ASSIGNMENT SHEET

PART II

SITUATION: Purchase storage facilities versus continue to store wheat at elevator (per bushel)

ADDITIONAL COSTS

Interest and depreciation =	$ .045
Electricity =	$ .002
Chemical =	$ .0085
Maintenance =	$ .031
Insurance =	$ .026
Labor =	$ .018
Labor and trucking =	$ .03
	$ .1605

ADDITIONAL RETURNS

None

REDUCED RETURNS

Shrinkage =	$ .0525

REDUCED COSTS

Elevator charges $.025 × 6 months =	$ .150

A. TOTAL ADDITIONAL COSTS AND REDUCED RETURNS

$ .213

B. TOTAL ADDITIONAL RETURNS AND REDUCED COSTS

$ .150
−.213

NET CHANGE IN INCOME (B MINUS A) $− .063

ANSWERS TO ASSIGNMENT SHEET

PART III

SITUATION: Drop a five-sow, two-litter-per-year feeder pig enterprise versus adding ten milking cows to the dairy herd

ADDITIONAL COSTS

Barn remodeled =	$1,600.00
Cow investment =	1,000.00
Purchased feed =	5,200.00
Supplies, etc. =	2,500.00
Operator labor = (wants $1,000 for family living)	1,000.00
	$11,300.00

ADDITIONAL RETURNS

15,000 lbs milk sold @ $11/cwt × 10 cows =	$16,500.00
2 cull cows sold @ $550 =	1,100.00
7 calves sold @ $125 =	875.00
	$18,475.00

REDUCED RETURNS

85 head feeder pigs @ $45 =	$3825.00
2 head cull sows @ $160 =	320.00
	$4145.00

REDUCED COSTS

Purchased hog feed =	$4,000.00
Supplies, etc. =	600.00
Operator labor 120 hours @ $4 =	480.00
	$5,080.00

A. TOTAL ADDITIONAL COSTS AND REDUCED RETURNS	$15,445.00	B. TOTAL ADDITIONAL RETURNS AND REDUCED COSTS	$23,555.00
			– $15,445.00
NET CHANGE IN INCOME (B MINUS A)			$8,110.00

PARTIAL BUDGETING
UNIT IX

TEST

NAME ________________________________ SCORE ______________

1. Match terms associated with partial budgeting to their correct definitions. Write the correct numbers in the blanks.

______a. Systematic procedure for making decisions

______b. Process for estimating the economic effects of some change in the farm business

______c. Costs incurred by the farm business that do not vary with the level of production in the short run

______d. Costs incurred by the farm business that change directly with the level of production because of different amounts of variable input needed at different levels of output

1. Partial budgeting
2. Variable costs
3. Fixed costs
4. Budgeting

2. Select from the following list uses of partial budgeting. Write an "X" in the blank before each correct answer.

______a. Estimating economic effects of adjustments on some portion of the farm business

______b. Revealing liquidity and solvency

______c. Evaluating changes in uses of resources that are not fixed

______d. Making only necessary adjustments when a relatively small change is being considered in the business

______e. Recording growth of farm business through changes in net worth

______f. Showing only the effect on net income of a change in the business

3. Distinguish between positive and negative effects of partial budgeting. Write a "P" for positive and an "N" for negative.

______a. Change will eliminate or reduce some costs

______b. Change will eliminate or reduce some returns

______c. Change will cause additional costs to be incurred

______d. Change will cause additional revenues to be incurred

TEST

4. State benefits of partial budgeting.

a. ______________________________

b. ______________________________

5. Match components of a partial budget to their correct descriptions. Write the correct numbers in the blanks.

______a. List of additional expenses that will be incurred if the change is made

______b. List of returns that would no longer be received under the proposed plan

______c. Sum of total negative economic effects of making the proposed change

______d. List of additional income that will result if the change is made

______e. List of estimated expenses that would no longer be incurred if the change is made

______f. Sum of total positive economic effects of making the proposed change

______g. Total additional returns and reduced costs minus total additional costs and reduced returns

1. Total additional costs and reduced returns
2. Total additional returns and reduced costs
3. Additional costs
4. Net change in income
5. Reduced returns
6. Reduced costs
7. Additional returns

6. Arrange in order steps in the partial budgeting process. Write a "1" before the first step, a "2" before the second step, and so on.

______a. Evaluate alternate solutions

______b. Evaluate and accept consequences

______c. Define situation

______d. Make decision consistent with goals and objectives

______e. Gather information about alternate solutions

______f. Put decision into effect

(NOTE: Test question 7 lists the assignment sheet. It is an important part of this test. If it has not been completed, check with your instructor.)

7. Complete partial budgets.

PARTIAL BUDGETING
UNIT IX

ANSWERS TO TEST

1.
   a. 4
   b. 1
   c. 3
   d. 2

2. a, c, d, f

3.
   a. P
   b. N
   c. N
   d. F

4.
   a. Aids in evaluating changes
   b. Provides a plan for the future

5.
   a. 3
   b. 5
   c. 1
   d. 7
   e. 6
   f. 2
   g. 4

6.
   a. 3
   b. 6
   c. 1
   d. 4
   e. 2
   f. 5

7. Evaluated to the satisfaction of the instructor

MARKETING
UNIT X

UNIT OBJECTIVE

After completing this unit, the cooperator should be able to collect and interpret market information and to make marketing decisions based on the concepts of marketing. The cooperator will show this knowledge by completing the assignment sheets and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the cooperator should be able to

1. Match terms associated with marketing to their correct definitions.
2. Select from a list factors that add to the marketing cost of products.
3. State marketing problems that face a farmer.
4. Distinguish between marketing and selling from a producer's viewpoint.
5. State characteristics a farmer looks for in a market system.
6. State characteristics an agribusiness firm looks for in a market system.
7. Select from a list characteristics a consumer looks for in a market system.
8. State cooperator goals in making marketing decisions.
9. Distinguish between supply and demand.
10. Select from a list factors that distinguish supply and demand curves.
11. Select from a list factors that affect the share that farmers receive for commodities.
12. State factors that cause shifts in demand of a commodity.
13. Discuss the role of price expectations in determining the supply of agricultural products and in making marketing decisions.
14. Discuss the concept of a market.
15. Match cash markets for grain to their correct descriptions.
16. Select from a list factors that influence time to market grain.

OBJECTIVE SHEET

17. State market changes that cause prices of cash markets for grain to fluctuate.
18. Match marketing channel processes to their correct definitions.
19. Name other methods of marketing grain.
20. Match cash markets for livestock to their correct descriptions.
21. Select from a list characteristics of the Packers and Stockyards Act.
22. State factors that affect the net price of cattle.
23. Select from a list factors that affect seasonal high and low market prices for livestock.
24. Match types of price variations to their correct descriptions.
25. State the uses of market outlook information.
26. Name sources of market information.
27. Plot supply and demand curves.
28. Collect and interpret market information.

MARKETING
UNIT X

SUGGESTED ACTIVITIES

I. Unit contents

   A. Objective sheet

   B. Suggested activities

   C. Supplement #1 -- Types of Livestock and Months of Year When Prices Are Likely to Be Highest and Lowest

   D. Information sheet

   E. Assignment sheets

      1. Assignment Sheet #1 — Plot Supply and Demand Curves

      2. Assignment Sheet #2 — Collect and Interpret Market Information

   F. Answers to assignment sheets

   G. Test

   H. Answers to test

II. Instructor's guide

   A. Obtain materials to supplement unit.

      1. Collect newspapers so that cooperators will have access to current market information.

      2. *Oklahoma Market Report* — Subscribe from the Oklahoma Department of Agriculture, 122 State Capitol, Oklahoma City, Oklahoma 73105.

      3. *Market Viewpoints*, *Hedging Hints for Livestock Producers*, and *Agricultural Policy and Economic Issues* — Subscribe from the Oklahoma State University Cooperative Extension, 513 Ag Hall, Stillwater, Oklahoma 74078.

      4. Graphs — Obtain from Farm Credit Bank of Wichita, 151 North Main, Wichita, Kansas 67202.

      5. Wagonmaster game — Obtain from Farm Business Management Curriculum Specialist, Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1500 West Seventh Avenue, Stillwater, Oklahoma 74074, or 4-H Extension Office, 001 Animal Science Building, Oklahoma State University, Stillwater, Oklahoma 74078.

SUGGESTED ACTIVITIES

6. Reference copy of *Basic Market Concepts* — Obtain from John Ikerd, Oklahoma State University Cooperative Extension, 513 Ag Hall, Stillwater, Oklahoma 74078.

B. Introduce unit.

1. Explain that many farmers find that the one weakness in their farm management strategies is the marketing of their products. Most farmers are "price takers."

2. Use the Wagonmaster marketing game to illustrate supply and demand. Use as many marketing terms as possible when playing the game.

C. Provide cooperators with objective sheet.

D. Discuss unit and specific objectives.

E. Provide cooperators with information and assignment sheets.

F. Discuss information and assignment sheets.

1. Develop a crossword puzzle to introduce terms and definitions in Objective 1. Explain to cooperators that understanding the many unfamiliar terms will enhance their ability to study marketing literature. Mention to cooperators that forward pricing, including cash contracts and hedging, will be discussed in *Farm Business Management II* curriculum.

2. Discuss Objectives 2 and 3. Have cooperators give additional factors and problems.

3. Discuss Objective 4. Have cooperators share their marketing and selling experiences. Ask cooperators whether they market their commodities or whether they are "price takers."

4. Discuss Objectives 5 through 8. Point out that the farmer, the agribusiness firm, and the consumer all have expectations of the market system. Emphasize the importance of understanding these expectations if the farmer hopes to compete in the marketplace. Encourage cooperators to review the steps in decision making used to determine their own marketing goals.

5. Prepare a graph of Figure 1 on a transparency or poster to illustrate supply and demand when discussing Objectives 9 and 10. Point out how increases or decreases in supply and demand can affect market prices. Have cooperators complete Assignment Sheet #1.

6. Discuss Objective 11, pointing out the following changes.

    a. Form changes

    EXAMPLES: Processing, sorting, grading

SUGGESTED ACTIVITIES

b. Time changes

EXAMPLES: Storability or perishability

c. Location changes

EXAMPLES: Transportation and handling costs

d. Possession changes

EXAMPLES: Marketing fees, brokerages

e. Competition changes

EXAMPLE: Existence of more than one competitive product

7. When discussing Objectives 12 through 14, review situations created during marketing game or similar activity.

8. Discuss Objective 15, and have cooperators list markets for their grain commodities.

9. Discuss Objectives 16 and 17 by encouraging cooperators to share their experiences in determining the timing and prices accepted when marketing their grain. Supplement your instruction with the following information.

   a. Factors that determine federal grades of grain

      1) Test weight
      2) Moisture content
      3) Cleanliness
      4) Purity of type
      5) Soundness of kernels
      6) Condition of grain

   b. Main functions of product standards

      1) Eliminating abuse in market
      2) Providing foundation for market system
      3) Protecting farmer, buyer, and consumer

10. Discuss Objective 18. Have cooperators name examples of each step of the marketing channel.

SUGGESTED ACTIVITIES

11. Discuss Objective 19, and have cooperators list the most common methods for marketing their grain. Discuss the advantages and disadvantages of selling cash grain at harvest, storing grain at harvest for sale at a later date, and farm storage versus commercial storage of grain.

12. Discuss Objective 20. Have cooperators list the kinds of markets they use for marketing livestock.

13. Discuss Objective 21, explaining the importance of the Packers and Stockyards Act. Supplement your instruction with information in the following areas.

    a. Methods of selling livestock at a livestock auction

    b. Types of charges used by most livestock auctions

    c. Types of selling fees used most often by livestock auction owners

    d. Factors determining the value of fat cattle

14. Discuss Objective 22, and state factors that cause livestock prices to fluctuate.

15. Discuss Objectives 23 and 24 by pointing out ways progressive livestock producers use market changes. Use Supplement #1 to supplement your instruction.

16. Use examples of market outlook information when discussing Objectives 25 and 26. Point out that outlook information at present is not perfect, and probably never will be. However, less than perfect information may be far superior to none.

    SUGGESTIONS:

    - Emphasize that large firms conduct surveys and inspections seeking to anticipate USDA reports.

    - Use charts or plot grain and livestock cash and future markets for several months to illustrate use of market information. Charts may be used as a bulletin board display.

    - Use "Oklahoma Farm Prices" section of the *OSU Enterprise Budget Book* to illustrate historical prices.

    - Point out the roles of the fundamentalist and technician in using market outlook information.

17. Discuss Assignment Sheet #2. Have cooperators complete Assignment Sheet #2 before on-farm instruction.

SUGGESTED ACTIVITIES

G. Arrange for a grain elevator manager or commission company buyer to act as a resource person for the class.

H. Have cooperators begin charting cash markets for their major commodities. Assist them with charts during on-farm instruction.

I. Consider conducting a special class session to explain charting market prices, plotting moving averages, computing seasonal indexes, and developing a marketing plan.

J. Give test.

K. Critique test.

L. Reteach if necessary.

III. Unit references

A. *Agricultural Economics Curriculum Workshop*. Ames, Iowa: Iowa State University and Iowa Department of Public Instruction, IAV!M Center, 1981.

B. Denker, Robert. *Agriculture Marketing*. Columbia, Missouri: Instructional Materials Laboratory, University of Missouri-Columbia, 1979.

C. Ikerd, John E. *Basic Market Concepts*. Raleigh, North Carolina: Department of Economics, North Carolina State University, 1974.

D. Ikerd, John E. *Market Viewpoints*. Stillwater, Oklahoma: Department of Agricultural Economics, Oklahoma State University, 1981.

E. Patton, Bob, and Cecil Cox. *Vocational Agriculture III*. Stillwater, Oklahoma: State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1978.

F. Shepherd, Geoffrey S., Gene A. Futrell, and J. Robert Strain. *Marketing Farm Products*. Ames, Iowa: Iowa State University Press, 1977.

G. Ward, Clement E. *Marketing and Pricing Fed Cattle*. Stillwater, Oklahoma: Oklahoma State University Fact Sheet No. 450, 1980.

H. Ward, Clement E., and Francis X. O'Carroll. *Marketing Feeder Cattle for Higher Profits*. Stillwater, Oklahoma: Oklahoma State University Cooperative Extension Service Fact Sheet No. 447, 1980.

MARKETING
UNIT X

SUGGESTED ACTIVITIES

SUPPLEMENT #1 — TYPES OF LIVESTOCK AND MONTHS OF YEAR WHEN PRICES ARE LIKELY TO BE HIGHEST AND LOWEST

CATTLE

Slaughter Steers

A. Prime, choice, and good

1. Highest prices are in April and September
2. Lowest prices are in June, and from October to February

(NOTE: The lowest prices for the top three grades are in June because June is the season of heaviest receipts. June is the season of heaviest receipts because most feeders winter-feed and market in the late spring. The price spread between prime and choice is the widest from January through April.)

B. Other grades

1. Highest prices are from August to October
2. Lowest prices are from December to March

Slaughter Heifers

A. Highest prices are in January and August

B. Lowest prices are from September through November

(NOTE: This seasonal pattern is significantly different than that of slaughter steers. It appears that a 3¢ to 4¢ spread is typically present between heifers and steers.)

Cows

A. Highest prices are from March to July

B. Lowest prices are from October to February

(NOTE: Low prices are due to the heavy run of grass cattle in the late fall, and the heavy culling of beef herds in early winter to reduce winter feed costs.)

Feeder Calves

A. Highest prices are from March to May

B. Lowest prices are in December

(NOTE: The March to May high reflects a strong spring demand for steers to go on grass and into feedlots. Feeder cattle receipts are greatest in the fall.)

SUGGESTED ACTIVITIES

SUPPLEMENT #1

SHEEP

Grass-Finished Lambs

A. Highest prices are in May and June

B. Lowest prices are from August to December

(NOTE: Early lambs have price advantages. Breed ewes so that lambs come early; keep lambs on good spring pasture. Creep feeding may be profitable.)

Slaughter Lambs

A. Highest prices are from February to May

B. Lowest prices are from December to February

(NOTE: Fed lambs are hard to market according to seasonal cycles. A person who feeds lambs must buy lambs when they are available and must market them before they become too old and heavy.)

Feeder Lambs

A. Highest prices are from December to April

(NOTE: Very few lambs are available between December and April to take advantage of this high price.)

B. Lowest prices are from May through September

(NOTE: July and August bring the highest summer month prices; however, lambs may not be available.)

SWINE

Market Barrows and Gilts

A. Highest prices are from June through August

(NOTE: Oklahoma producers may take advantage of high prices by timing farrowing dates of sows [farrow more sows when corn belt farmers farrow less], and by controlling feeding to correspond with high price markets.)

B. Lowest prices are in November, December, March and April

(NOTE: The majority of farrowed spring and early summer pigs are marketed in November to May. This marketing trend normally causes the lowest prices of the year.)

SUGGESTED ACTIVITIES

SUPPLEMENT #1

Sows

A. Highest prices are from June to October

(NOTE: These high prices are the result of extensive spring farrowing. Following weaning, sows are marketed.)

B. Lowest prices are in December

Feeder Pigs

A. Highest prices are from February through April

B. Lowest prices are in July

(NOTE: Peaks and lows in feeder pig prices precede seasonal peaks and lows in slaughter hog prices by the length of normal feeding periods.)

MARKETING
UNIT X

INFORMATION SHEET

I. Terms associated with marketing

A. Market — Meeting or coming together of supply and demand

(NOTE: A market occurs whenever an exchange of commodities occurs between a ready, willing, and able buyer and a seller. A market may also be called a *market place*, *market area*, *market time*,or *commodity market*.)

B. Deficit — Point at which expenses exceed income

C. Marketing information — Large variety of data necessary to evaluate and analyze markets and to make market decisions

D. Marketing channel — Route a commodity takes on its way from producer to ultimate consumer

E. Marketing margin — Difference between price consumers pay for final product and price producers receive for basic commodity

F. Marketing functions — Specific activities performed within the marketing channel to add utility or value to a commodity

G. Marketing outlet — Avenue that a producer uses to move a commodity through a marketing channel

H. Commodity Credit Corporation — Independent agency of the USDA responsible for making loans to qualifying farmers participating in government programs

I. Cooperative marketing — Process whereby farmers pool their crops or livestock for shipment to market or otherwise join together to increase bargaining power

J. Parity price — Hypothetical price that a farmer must receive for a commodity to be able to buy the same amount of goods and services in the current period that could have been bought in some base time period

EXAMPLE: Formula commonly used to calculate current parity price

$$\text{Parity Price} = \frac{\begin{array}{c}\text{Average Price Received}\\ \text{for Commodity}\\ \text{Most Recent Ten Years}\end{array}}{\begin{array}{c}\text{Average Index of All Prices,}\\ \text{Most Recent Ten Years}\end{array}} \times \text{Current Index of Prices Paid}$$

INFORMATION SHEET

K. Reseal — Extension of storage of grain for recourse of an extended commodity credit loan

L. Effective demand — Desire of consumer for the commodity, backed by purchasing power

M. Equilibrium price — Price at which the quantity supplied is equal to the quantity demanded for a particular commodity at a given time and place

N. Elasticity — Percentage change in one variable in response to a percentage change in another variable

(NOTE: Price elasticity of demand refers to the percentage change in the quantity of a good that is purchased in response to a 1 percent change in price; price elasticity of supply refers to the percentage change in the quantity of a good that is supplied in response to a 1 percent change in price.)

O. Sensitivity — Degree of response of one market faction to another

EXAMPLE: Quantity purchased versus price

(NOTE: Some economists substitute the word *sensitivity* to explain the concepts of elasticity.)

P. Price cycle — Changes in price that tend to repeat a similar pattern over a period of years

Q. Price seasonality — Changes in price that tend to repeat a similar pattern within each year

R. Profit — Excess after payments have been made to all factors of production

(NOTE: The above definition is for the economic concept of profit. The accounting concept of profit is the excess of returns over expenditures.)

S. Commodity — Basic class of goods that can be bought and/or sold; article of trade or commerce

EXAMPLES: Wheat, cattle

T. Free market — Market where true interaction of supply and demand is free of interference of government controls, tariffs, monopolies, or other artificial barriers

U. Per capita consumption — Average quantity of a commodity consumed per person within a given population

V. Producer — Person or firm that either produces, manufactures, or creates utility in a commodity or a service as it moves through the marketing channel

INFORMATION SHEET

W. Pure competition — Market in which no producer or consumer has the ability to control or perceptibly affect market supply or market demand

X. Buyer — Purchaser of a commodity offered for sale or exchange

Y. Seller — Supplier of a commodity offered for sale or exchange

Z. Shortage — Condition that exists when quantity supplied is less than quantity demanded at some given price level

AA. Surplus — Condition that exists when quantity supplied is greater than quantity demanded at some given price level

BB. Ultimate consumer — Person or firm that finally utilizes or consumes a commodity

CC. Utility — Usefulness or value of a commodity as measured by its ability to satisfy want

(NOTE: Creation of utility generally involves changing the form, place, time, and/or ownership of a commodity.)

DD. Seasonal production — Production of a commodity associated with a given season or time of year due to production factors or to demand

II. Factors that add to the marketing cost of products

A. Transportation

B. Added service and quality

C. Quantity of food moving through market channels

D. General rise in price levels

III. Marketing problems that face a farmer

A. Specialization versus diversification in agriculture

B. Biological process of food production

C. Lack of identity of farm products

D. Different market systems for labor, professions, and so on

(NOTE: Other occupations are more insulated from the market than is farming.)

INFORMATION SHEET

IV. Marketing and selling from a producer's viewpoint

A. Marketing — Includes all steps and processes in getting product from producer to consumer

(NOTE: Marketing may be defined as producing, delivering, and pricing a commodity so as to maximize its value relative to costs and with respect to time, place, form, and ownership.)

B. Selling — Requires accepting offered price at time of production and delivery

V. Characteristics a farmer looks for in a market system

A. Treats all producers equitably

(NOTE: The farmer looks for a system of pricing and market access based upon the product's market performance rather than the personal attitudes of the buyer toward the farmer as an individual.)

B. Provides incentives for prices to adjust to production costs

C. Reflects the quality/price differentials paid by consumers

D. Rewards the farmer's contribution as adequately as it rewards marketing firms for their contributions

E. Provides access to convenient market outlets

F. Provides a viable choice among competing buyers

G. Creates the ability to move to market and/or to sell any amount that the farmer may choose at any time

H. Provides sufficient, timely, and adequate market information so that the farmer may obtain the best available offer at any given time

I. Provides sufficient confidence in marketing processes and institutions so that farmers feel the system is not working against them or other producers

J. Provides bargaining power equal to or, preferably, exceeding that of the procurement agency with which the farmer deals

K. Gives the farmer the ability to obtain equitable treatment with other producers within the contracting, marketing, or bargaining process

VI. Characteristics an agribusiness firm looks for in a market system

A. Allows firm to meet sales and profit objectives

INFORMATION SHEET

B. Provides security for the firm in the form of stable prices and sales

(NOTE: Some firms may increase profits with variable prices.)

C. Allows firm to develop market power through brand names and control of production

D. Maintains a large supply of products

(NOTE: A firm's profits may depend on volume rather than price.)

E. Provides timely and accurate market information

VII. Characteristics a consumer looks for in a market system

A. Maintains adequate supplies of quality food at reasonable prices

B. Provides an assortment of product forms at time and place desired

C. Provides values commensurate with costs

VIII. Cooperator goals in making marketing decisions

A. Acceptable price

B. Acceptable profit

C. Acceptable risk

D. More convenience or less labor

IX. Supply and demand

(NOTE: Market price is determined by the interaction of supply and demand: if demand increases, prices rise; if supply increases, prices fall. A higher price decreases the quantity demanded or taken and increases the quantity supplied or offered. A lower price increases the quantity demanded or taken and decreases the quantity supplied or offered. Market price moves up or down and adjusts the quantity supplied and the quantity demanded to a point where supply is just equal to demand, thereby clearing the market.)

A. Supply — Amounts or quantities of goods or services that would be offered for sale by producers in a given market at a given series of prices over a given period of time

B. Demand — Amounts or quantities of goods or services that consumers in a given market would be willing to purchase at a given set of prices over a given period of time

INFORMATION SHEET

X. Factors that distinguish supply and demand curves

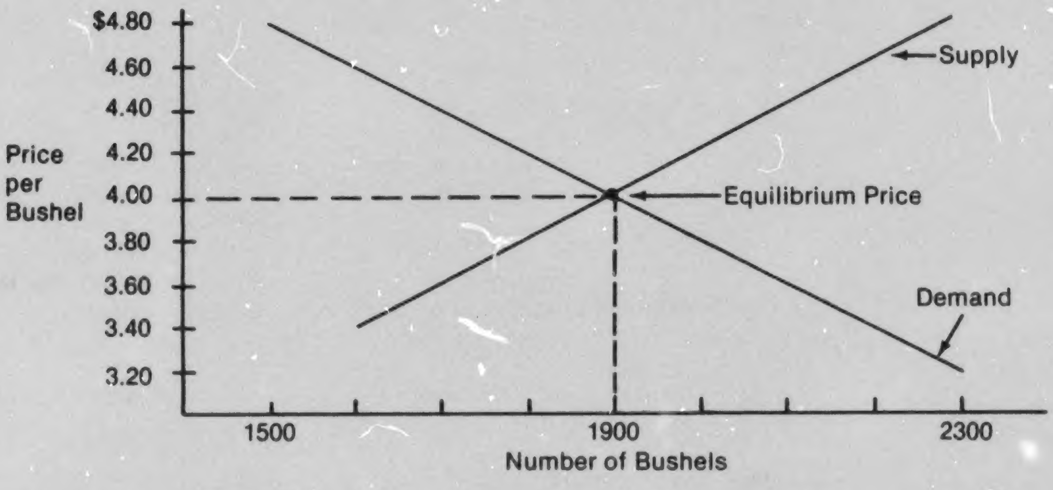
A. Demand curve — Never slopes upward; usually slopes downward (Figure 1)

B. Supply curve — Never slopes downward; usually slopes upward (Figure 1)

(NOTE: The point of intersection where supply and demand cross is known as the *equilibrium price*.)

EXAMPLE:

FIGURE 1



XI. Factors that affect the share that farmers receive for commodities

A. Processing

EXAMPLE: Cost of changing product form to satisfy the consumer (eggs into bakery products)

B. Perishability

EXAMPLES: Spoilage, expensive refrigeration, transportation

C. Bulkiness

EXAMPLES: Products requiring large quantities of space; handling costs

D. Extreme seasonality of production

EXAMPLES: Pecans, fruits, vegetables

INFORMATION SHEET

XII. Factors that cause shifts in demand of a commodity

- A. Increase or decrease of population
- B. Changes in income and purchasing power
- C. Changes in tastes and preferences of consumers
- D. Changes in prices

  (NOTE: Price changes affect quantity demanded, but not overall demand.)

- E. Expectations of buyers

XIII. Roles of price expectations in determining the supply of agricultural products and in making marketing decisions

- A. Supply of agricultural products
  - 1. Lag in time between time when production plans are made and time when crops or livestock are ready to sell

    (NOTE: Most production decisions for agricultural products are made long before the prices of the products are known. The lagged supply response in agricultural production is the basic cause of price cycles for many agricultural products.)

  - 2. Forward pricing methods allow producer to produce for a known price
- B. Marketing decisions
  - 1. Producers would prefer not to sell their products on a given day, even at higher prices, if they feel that future prices will be higher
  - 2. Producers would be inclined to sell, even at low prices, if they expect future prices to be lower
  - 3. Limited degree of flexibility in choosing the time to market

    (NOTE: Highly perishable products such as eggs, milk, fruits, and vegetables must be sold when ready, regardless of price.)

XIV. Concept of a market

- A. Market is a coming together of the forces of supply and demand
- B. Market price is the price at which supply and demand come together and are equal

INFORMATION SHEET

C. Markets that differ with respect to product form, market location, and/or time of transaction must be treated as separate markets

EXAMPLE: Consumer market for beef is not the same market as the farm-level market for cattle (beef steak versus live cattle)

XV. Descriptions of cash markets for grain

A. Independent elevator — Operated and controlled by individuals within the community

B. Cooperative elevator — Owned cooperatively by farmers of the area

C. Line elevator — Owned and operated by a central headquarters or chain, but located within the community

D. Terminal — Operated by grain dealers or cooperatives who buy grain for storage and sell to millers and processors or to the export market

(NOTE: Because of the large storage capacity and investment powers, the terminal elevator operators/owners are able to utilize the futures market for hedging. The practice of buying and selling in futures is used by all elevators as they purchase grain.)

XVI. Factors that influence time to market grain

A. Financial status of producer

B. Availability of storage facilities

C. Cost of storage

D. Price at harvest

E. Futures price

F. Carryover or total stock

G. Potential or expected demand

H. Projected national yield

XVII. Market changes that cause prices of cash markets for grain to fluctuate

A. Supply of grain or competing products

EXAMPLE: A large wheat crop that brings the price to a "feeding" level could cause the corn market to drop.

INFORMATION SHEET

B. Demand

EXAMPLES: More hogs fed, more cattle on feed, increased exports

C. Imperfect information

EXAMPLE: Lack of reports on amount of grain or livestock on hand

D. Farmer adjustments

EXAMPLE: Farmers learn of a large corn crop, so they place more cattle on feed, or farrow more sows.

XVIII. Definitions of marketing channel processes

A. Assembling — Bringing commodities together for shipment

B. Grading — Sorting commodity for uniform quality and size

C. Processing — Changing commodity to a more usable form to meet consumer demands

D. Transporting — Moving commodity to appropriate market

E. Storing — Storing commodity for future use

F. Financing — Investing as a form of credit to a farmer until commodity can be sold or processed

G. Risk-taking — Assuming risk until commodity has been sold or processed

EXAMPLE: Movement of commodity through market channels provides chance of a lower price or reduced quality.

XIX. Other methods of marketing grain

A. Selling cash grain at harvest

B. Storing grain at harvest for later sale

C. Forward contracting

D. Hedging with futures market

E. Feeding

F. Selling for seed

INFORMATION SHEET

G. Selling for special markets

EXAMPLE: Feedlot with demand for high-moisture grain

XX. Descriptions of cash markets for livestock

A. Livestock auction — Trading center where livestock are assembled at regular intervals and sold by public bidding

(NOTE: This livestock market is usually locally owned and operated, and sales are held weekly. All classes of livestock are sold, and the selling service is paid by commission based on percentage of the selling price.)

B. Terminal market — Trading center where facilities are provided for receiving, caring for, and handling livestock; where several selling agencies are in operation; and where the privileges of buying and selling are available to all who wish to use them

(NOTE: Livestock are usually sold several days a week. Livestock are assigned to a commission firm. For a fee, the stockyard company furnishes pens, feed, scales, and water.)

C. Trader or dealer — Individual, not a market agency, engaged in the business of buying and selling livestock for individual's own account, usually on a speculative basis

D. Order buyer — Individual who purchases livestock for others

E. Packer market — Facility operated privately and solely by a packer or slaughterer; livestock is purchased directly from the producer for slaughter

XXI. Characteristics of the Packers and Stockyards Act

(NOTE: This federal statute regulates business practices of those engaged in interstate commerce of livestock, live poultry marketing, and meat or poultry packing.)

A. Helps establish a true market value of livestock and poultry

B. Protects consumers against unfair business practices

C. Is administered by USDA

D. Covers registering and bonding, facilities and rates, and scales and weighing

XXII. Factors that affect the net price of cattle

A. Shrinkage

INFORMATION SHEET

B. Packer needs

C. Average of the lot

D. Transportation

E. Selling costs

EXAMPLES: Auction fees, commission fees, yardage

F. Overall supply and demand

G. Quality or grade of cattle

XXIII. Factors that affect seasonal high and low market prices for livestock

A. Seasonality in supply and demand

EXAMPLE: Holidays

B. Federal farm programs and controls

C. Business conditions and general price levels

EXAMPLES: Consumer habits, traditional calving dates, harvest months

D. Feed supplies and water conditions

EXAMPLE: Weather

E. Exports

XXIV. Descriptions of types of price variations

A. Long-run trend — Level of prices over a long period of time, usually caused by adjustments in supply and demand

(NOTE: A long-run trend usually lasts a minimum of seven years.)

B. Cycle — Time period during which the price for certain commodities advances from a low point to a high point and then returns to a low point

C. Seasonal — Price of commodities during the twelve-month period or seasonality of demand

(NOTE: Seasonal variations tend to follow a similar pattern from year to year.)

INFORMATION SHEET

D. Short-run and random — Fluctuations of prices from day-to-day or from week-to-week

XXV. Uses of market outlook information

A. As a management tool for making marketing decisions

B. For reports of market conditions

(NOTE: Main sources of market data are USDA reports.)

C. For projections of expected prices, costs, numbers, and so on

D. By outlook economists to evaluate alternatives, develop expectations, and assign probabilities

E. As an indicator of limitations of outlook data

EXAMPLES: Forecasting imperfect data, unpredictable actions of producers and consumers, changes in economic environment over time

XXVI. Sources of market information

A. Radio and television

B. Newspapers

C. United States Department of Agriculture (USDA)

EXAMPLES: *Federal Market News*, *Agricultural Marketing Service*

D. OSU Extension Service

EXAMPLES: *Market Viewpoints*, *Hedging Hints for Livestock Producers*, *Agricultural Policy and Economic Issues*, fact sheets, research bulletins, teleconferences

E. Oklahoma Department of Agriculture

EXAMPLE: *Oklahoma Market Report*

F. Local elevators or markets

G. Feed stores

H. Subscription services

EXAMPLES: *Doane's Agricultural Report*, *The Kiplinger Agricultural Letter*, Kerr Foundation, Noble Foundation, *ProFarmer*, farm magazines

MARKETING
UNIT X

ASSIGNMENT SHEET #1 — PLOT SUPPLY AND DEMAND CURVES

NAME ______________________________ SCORE ______________

It is important to examine the supply and demand concept to have a better understanding of the free enterprise system.

Use the supply and demand schedules in Table 1 for chocolate bars in an assumed trade area to answer the questions below.

TABLE 1

Price Per Pound	Pounds of Chocolate Bars per Year			
	Supply	Demand	Surplus	Shortage
$1.00	300,000	100,000	200,000	0
0.90	250,000	150,000	100,000	0
0.80	200,000	200,000	0	0
0.70	150,000	250,000	0	100,000
0.60	100,000	300,000	0	200,000

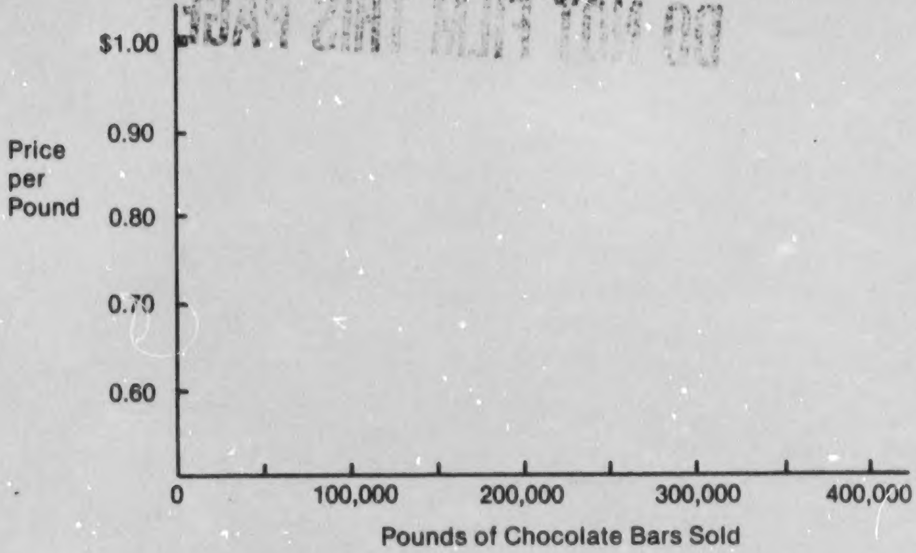
A. If the price were 60¢ per pound, what would happen? ______________________

B. If the price were $1 per pound, what would happen? ______________________

C. What is the equilibrium price in Table 1? ______________________

ASSIGNMENT SHEET #1

D. Using the information in Table 1, plot a supply curve and a demand curve on the graph below. Label the supply curve, the demand curve, and the equilibrium price.



MARKETING
UNIT X

ASSIGNMENT SHEET #2 — COLLECT AND INTERPRET MARKET INFORMATION

NAME ______________________________ SCORE ____________

One of the first steps in developing a marketing plan is to collect market information for the commodities grown on the farm or for the commodities being considered in the farming operation.

Use different sources of market information to find the cash market price of the crops and livestock listed. Be sure to record your source of market information and the date the information was obtained. When completed, return assignment sheet to instructor for evaluation.

A. Crops

Commodity	Cash Price	Source of Information	Date
1. Wheat			
2. Corn			
3. Cotton			
4. Milo			
5. Barley			
6. Soybeans			
7. Alfalfa hay			
8.			
9.			
10.			

B. Livestock

1. Cattle

a. Source of information ______________________________

ASSIGNMENT SHEET #2

b. Date ________________

c. Estimated receipts ________________

d. Activity of market ________________

e. Price range

1) Slaughter steers ________ Grade ________ Weights ________

2) Slaughter heifers ________ Grade ________ Weights ________

3) Slaughter cows ________ Grade ________ Weights ________

4) Slaughter bulls ________________

5) Feeder steers ________ Grade ________ Weights ________

6) Feeder heifers ________ Grade ________ Weights ________

7) Cow/calf pairs ________________

8) Other ________________

2. Hogs

a. Source of information ________________

b. Date ________________

c. Estimated receipts ________________

d. Activity of market ________________

e. Price range

1) U.S. No. 1 ________ Weights ________

2) U.S. No. 2 ________ Weights ________

3) U.S. No. 3 ________ Weights ________

4) U.S. No. 4 ________ Weights ________

5) Sows ________ Weights ________

6) Boars ________________

7) Feeder pigs ________ Grade ________ Weights ________

8) Other ________________

ASSIGNMENT SHEET #2

3. Sheep

   a. Source of information ____________________

   b. Date ____________________

   c. Estimated receipts

   d. Activity of market ____________________

   e. Price range

      1) Slaughter ewes __________ Grade __________ Weights __________

      2) Feeder lambs __________ Grade __________ Weights __________

      3) Slaughter lambs __________ Grade __________ Weights __________

MARKETING
UNIT X

ANSWERS TO ASSIGNMENT SHEETS

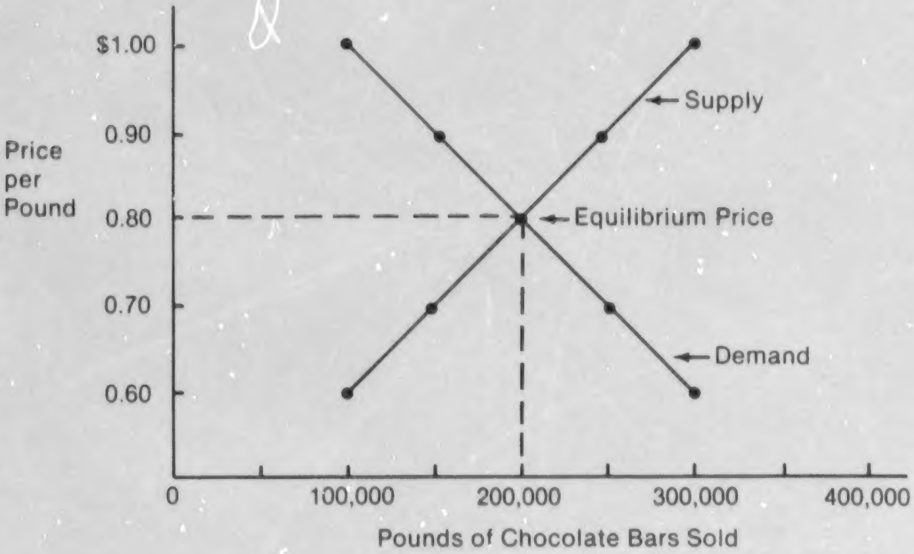
Assignment Sheet #1

A. There would be a shortage of 200,000 pounds of chocolate bars

B. There would be a surplus of 200,000 pounds of chocolate bars

C. 80¢ per pound

D.



Assignment Sheet #2 — Evaluated to the satisfaction of the instructor

MARKETING
UNIT X

TEST

NAME ____ SCORE ________________

1. Match terms associated with marketing to their correct definitions. Write the correct numbers in the blanks. Terms and definitions are continued on the following pages.

_____a. Independent agency of the USDA responsible for making loans to qualifying farmers participating in government programs

_____b. Avenue that a producer uses to move a commodity through a marketing channel

_____c. Specific activities performed within the marketing channel to add utility or value to a commodity

_____d. Difference between price consumers pay for final product and price producers receive for basic commodity

_____e. Route a commodity takes on its way from producer to ultimate consumer

_____f. Large variety of data necessary to evaluate and analyze markets and to make market decisions

_____g. Point at which expenses exceed income

_____h. Meeting or coming together of supply and demand

_____i. Percentage change in one variable in response to a percentage change in another variable

_____j. Price at which the quantity supplied is equal to the quantity demanded for a particular commodity at a given time and place

_____k. Desire of consumer for the commodity, backed by purchasing power

_____l. Extension of storage of grain for recourse of an extended commodity credit loan

1. Market
2. Deficit
3. Marketing information
4. Marketing channel
5. Marketing margin
6. Marketing functions
7. Marketing outlet
8. Commodity Credit Corporation
9. Elasticity
10. Equilibrium price
11. Effective demand
12. Reseal

TEST

______m. Process whereby farmers pool their crops or livestock for shipment to market or otherwise join together to increase bargaining power

______n. Hypothetical price that a farmer must receive for a commodity to be able to buy the same amount of goods and services in the current period that could have been bought in some base time period

______o. Changes in price that tend to repeat a similar pattern over a period of years

______p. Market in which no producer or consumer has the ability to control or perceptibly affect market supply or market demand

______q. Changes in price that tend to repeat a similar pattern within each year

______r. Person or firm that either produces, manufactures, or creates utility in a commodity or a service as it moves through the marketing channel

______s. Excess after payments have been made to all factors of production

______t. Average quantity of a commodity consumed per person within a given population

______u. Basic class of goods that can be bought and/or sold; article of trade or commerce

______v. Market where true interaction of supply and demand is free of interference of government controls, tariffs, monopolies, or other artificial barriers

______w. Production of a commodity associated with a given season or time of year due to production factors or to demand

______x. Purchaser of a commodity offered for sale or exchange

______y. Usefulness or value of a commodity as measured by its ability to satisfy want

13. Parity price
14. Cooperative marketing
15. Pure competition
16. Producer
17. Per capita consumption
18. Free market
19. Commodity
20. Profit
21. Price seasonality
22. Price cycle
23. Seasonal production
24. Utility
25. Ultimate consumer
26. Surplus
27. Shortage
28. Seller
29. Buyer
30. Sensitivity

TEST

_____z. Person or firm that finally utilizes or consumes a commodity

_____aa. Condition that exists when quantity supplied is greater than quantity demanded at some given price level

_____bb. Supplier of a commodity offered for sale or exchange

_____cc. Condition that exists when quantity supplied is less than quantity demanded at some given price level

_____dd. Degree of response of one market faction to another

2. Select from the following list factors that add to the marketing cost of products. Write an "X" in the blank before each correct answer.

_____a. Transportation

_____b. General rise in price levels

_____c. Added service and quality

_____d. Farmers' production costs

_____e. Quantity of food moving through market channels

_____f. Price at harvest

_____g. Shrinkage

3. State marketing problems that face a farmer.

a. ____

b. ____

c. ____

d. ____

4. Distinguish between marketing and selling from a producer's viewpoint. Write an "X" in the blank before the description of selling.

_____a. Includes all steps and processes in getting product from producer to consumer

_____b. Requires accepting offered price at time of production and delivery

TEST

5. State four characteristics a farmer looks for in a market system.

a. ____

____

b. ____

____

c. ____

____

d. ____

____

6. State two characteristics an agribusiness firm looks for in a market system.

a. ____

____

b. ____

____

7. Select from the following list characteristics a consumer looks for in a market system. Write an "X" in the blank before each correct answer.

_____a. Provides values commensurate with costs

_____b. Rewards the farmer's contribution as adequately as it rewards marketing firms for their contribution

_____c. Maintains adequate supplies of quality food at reasonable prices

_____d. Treats all producers equitably

_____e. Provides an assortment of product forms at time and place desired

8. State cooperator goals in making marketing decisions.

a. ____

b. ____

TEST

c. ______________________________

d. ______________________________

9. Distinguish between supply and demand. Write an "X" in the blank before the description of supply.

_____a. Amounts or quantities of goods or services that consumers in a given market would be willing to purchase at a given set of prices over a given period of time

_____b. Amounts or quantities of goods or services that would be offered for sale by producers in a given market at a given series of prices over a given period of time

10. Select from the following list factors that distinguish supply and demand curves. Write an "X" in the blank before each correct answer.

_____a. Demand curve never slopes upward; usually slopes downward

_____b. Supply curve always slopes downward

_____c. Demand curve always slopes upward

_____d. Supply curve never slopes downward; usually slopes upward

11. Select from the following list factors that affect the share that farmers receive for commodities. Write an "X" in the blank before each correct answer.

_____a. Processing

_____b. Perishability

_____c. Shipping

_____d. Bulkiness

_____e. Extreme seasonality of production

_____f. Surplus

_____g. Yardage

TEST

12. State three factors that cause shifts in demand of a commodity.

a. ______________________________

b. ______________________________

c. ______________________________

13. Discuss the role of price expectations in determining the supply of agricultural products and in making marketing decisions.

Supply of agricultural products — ______________________________

____

____

____

____

Marketing decisions — ______________________________

____

____

____

____

____

____

14. Discuss the concept of a market.

____

____

____

____

____

TEST

15. Match cash markets for grain to their correct descriptions. Write the correct numbers in the blanks.

_____a. Operated by grain dealers or cooperatives who buy grain for storage and sell to millers and processors or to the export market

_____b. Owned and operated by a central headquarters or chain, but located within the community

_____c. Operated and controlled by individuals within the community

_____d. Owned cooperatively by farmers of the area

1. Independent elevator
2. Cooperative elevator
3. Line elevator
4. Terminal

16. Select from the following list factors that influence time to market grain. Write an "X" in the blank before each correct answer.

_____a. Price at harvest

_____b. Projected national yield

_____c. Carryover or total stock

_____d. Price at planting

_____e. Futures price

_____f. Cost of storage

_____g. Availability of storage facilities

_____h. Cost of fertilizer

_____i. Financial status of producer

_____j. Shipping cost

_____k. Distance to local market

_____l. Local supplies at planting time

_____m. Cost of fuel

_____n. Potential or expected demand

TEST

17. State market changes that cause prices of cash markets for grain to fluctuate.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

18. Match marketing channel processes to their correct definitions. Write the correct numbers in the blanks.

_____a. Bringing commodities together for shipment

_____b. Assuming risk until commodity has been sold or processed

_____c. Sorting commodity for uniform quality and size

_____d. Investing as a form of credit to a farmer until commodity can be sold or processed

_____e. Changing commodity to a more usable form to meet consumer demands

_____f. Storing commodity for future use

_____g. Moving commodity to appropriate market

1. Assembling
2. Grading
3. Processing
4. Transporting
5. Storing
6. Financing
7. Risk-taking

19. Name four other methods of marketing grain.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

TEST

20. Match cash markets for livestock to their correct descriptions. Write the correct numbers in the blanks.

_____a. Facility operated privately and solely by a packer or slaughterer; livestock is purchased directly from the producer for slaughter

_____b. Individual who purchases livestock for others

_____c. Individual, not a market agency, engaged in the business of buying and selling livestock for individual's own account, usually on a speculative basis

_____d. Trading center where facilities are provided for receiving, caring for, and handling livestock; where several selling agencies are in operation; and where the privileges of buying and selling are available to all who wish to use them

_____e. Trading center where livestock are assembled at regular intervals and sold by public bidding

1. Livestock auction
2. Terminal market
3. Trader or dealer
4. Order buyer
5. Packer market

21. Select from the following list characteristics of the Packers and Stockyards Act. Write an "X" in the blank before each correct answer.

_____a. Helps establish a true market value of livestock and poultry

_____b. Establishes price for livestock

_____c. Protects consumers against unfair business practices

_____d. Is administered by USDA

_____e. Covers registering and bonding, facilities and rates, and scales and weighing

_____f. Establishes market dates for livestock

22. State four factors that affect the net price of cattle.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

TEST

23. Select from the following list factors that affect seasonal high and low market prices for livestock. Write an "X" in the blank before each correct answer.

______a. Federal farm programs and controls

______b. Exports

______c. Imports

______d. Business conditions and general price levels

______e. Feed supplies and water conditions

______f. Population

______g. Seasonality in supply and demand

24. Match types of price variations to their correct descriptions. Write the correct numbers in the blanks.

______a. Level of prices over a long period of time, usually caused by adjustments in supply and demand

______b. Fluctuations of prices from day-to-day or from week-to-week

______c. Time period during which the price for certain commodities advances from a low point to a high point and then returns to a low point

______d. Price of commodities during the twelve-month period or seasonality of demand

1. Long-run trend
2. Cycle
3. Seasonal
4. Short-run and random

25. State three uses of market outlook information.

a. ____

b. ____

c. ____

26. Name five sources of market information.

a. ____

b. ____

TEST

c. ______________________________

d. ______________________________

e. ______________________________

(NOTE: Test questions 27 and 28 list the assignment sheets. They are an important part of this test. If they have not been completed, check with your instructor.)

27. Plot supply and demand curves.

28. Collect and interpret market information.

MARKETING
UNIT X

ANSWERS TO TEST

1.

a.	8	k.	11	u.	19
b.	7	l.	12	v.	18
c.	6	m.	14	w.	23
d.	5	n.	13	x.	29
e.	4	o.	22	y.	24
f.	3	p.	15	z.	25
g.	2	q.	21	aa.	26
h.	1	r.	16	bb.	28
i.	9	s.	20	cc.	27
j.	10	t.	17	dd.	30

2. a, b, c, e

3. a. Specialization versus diversification in agriculture
   b. Biological process of food production
   c. Lack of identity of farm products
   d. Different market systems for labor, professions, and so on

4. b

5. Answer should include any four of the following
   a. Treats all producers equitably
   b. Provides incentives for prices to adjust to production costs
   c. Reflects the quality/price differentials paid by consumers
   d. Rewards the farmer's contribution as adequately as it rewards marketing firms for their contributions

ANSWERS TO TEST

- e. Provides access to convenient market outlets
- f. Provides a viable choice among competing buyers
- g. Creates the ability to move to market and/or to sell any amount that the farmer may choose at any time
- h. Provides sufficient, timely, and adequate market information so that the farmer may obtain the best available offer at any given time
- i. Provides sufficent confidence in marketing processes and institutions so that farmers feel the system is not working against them or other producers
- j. Provides bargaining power equal to or, preferably, exceeding that of the procurement agency with which the farmer deals
- k. Gives the farmer the ability to obtain equitable treatment with other producers within the contracting, marketing, or bargaining process

6. Answer should include any two of the following
   - a. Allows firm to meet sales and profit objectives
   - b. Provides security for the firm in the form of stable prices and sales
   - c. Allows firm to develop market power through brand names and control of production
   - d. Maintains a large supply of products
   - e. Provides timely and accurate market information

7. a, c, e

8. a. Acceptable price
   - b. Acceptable profit
   - c. Acceptable risk
   - d. More convenience or less labor

9. b

ANSWERS TO TEST

10. a, d

11. a, b, d, e

12. Answer should include any three of the following

    a. Increase or decrease of population

    b. Changes in income and purchasing power

    c. Changes in tastes and preferences of consumers

    d. Changes in prices

    e. Expectations of buyers

13. Discussion should include the following

    a. Supply of agricultural products

        1) Lag in time between time when production plans are made and time when crops or livestock are ready to sell

        2) Forward pricing methods allow producer to produce for a known price

    b. Marketing decisions

        1) Producers would prefer not to sell their products on a given day, even at higher prices, if they feel that future prices will be higher

        2) Producers would be inclined to sell, even at low prices, if they expect future prices to be lower

        3) Limited degree of flexibility in choosing the time to market

14. Discussion should include the following

    a. Market is a coming together of the forces of supply and demand

    b. Market price is the price at which supply and demand come together and are equal

    c. Markets that differ with respect to product form, market location, and/or time of transaction must be treated as separate markets

ANSWERS TO TEST

15. a. 4

    b. 3

    c. 1

    d. 2

16. a, b, c, e, f, g, i, n

17. a. Supply of grain or competing products

    b. Demand

    c. Imperfect information

    d. Farmer adjustments

18.

a.	1	e.	3
b.	7	f.	5
c.	2	g.	4
d.	6		

19. Answer should include any four of the following

    a. Selling cash grain at harvest

    b. Storing grain at harvest for later sale

    c. Forward contracting

    d. Hedging with futures market

    e. Feeding

    f. Selling for seed

    g. Selling for special markets

ANSWERS TO TEST

20. a. 5   d. 2

    b. 4   e. 1

    c. 3

21. a, c, d, e

22. Answer should include any four of the following

    a. Shrinkage

    b. Packer needs

    c. Average of the lot

    d. Transportation

    e. Selling costs

    f. Overall supply and demand

    g. Quality or grade of cattle

23. a, b, d, e, g

24. a. 1

    b. 4

    c. 2

    d. 3

25. Answer should include any three of the following

    a. As a management tool for making marketing decisions

    b. For reports of market conditions

    c. For projections of expected prices, costs, numbers, and so on

    d. By outlook economists to evaluate alternatives, develop expectations, and assign probabilities

    e. An an indicator of limitations of outlook data

ANSWERS TO TEST

26. Answer should include any five of the following
    - a. Radio and television
    - b. Newspapers
    - c. United States Department of Agriculture (USDA)
    - d. OSU Extension Service
    - e. Oklahoma Department of Agriculture
    - f. Local elevators or markets
    - g. Feed stores
    - h. Subscription services

27. Evaluated to the satisfaction of the instructor

28. Evaluated to the satisfaction of the instructor

INCOME TAX MANAGEMENT
UNIT XI

UNIT OBJECTIVE

After completing this unit, the cooperator should be able to complete a ten-month income tax estimate work sheet and determine income tax management strategies to maximize after-tax income. The cooperator will show this knowledge by completing assignment sheets and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the cooperator should be able to

1. Match to their correct definitions terms associated with income tax management.
2. Select from a list the purposes of income tax management and planning.
3. State reasons for keeping good records in income tax management.
4. List advantages and disadvantages of income tax accounting methods.
5. State guidelines for determining when to use income tax management strategies.
6. List types of records and information needed to fill out a ten-month income tax estimate work sheet.
7. State important filing dates for federal income tax returns.
8. Match to their correct uses income tax forms usually used by farmers and ranchers.
9. List special tax situations that can affect an individual's tax bracket.
10. Distinguish between income tax management strategies used to increase taxable income and those used to decrease taxable income.
11. Select from a list facts to remember about depreciation.
12. State facts to remember about capital gains tax.
13. Select from a list facts to remember about investment tax credit.
14. State characteristics of alternative minimum tax.
15. Match special tax considerations to their correct descriptions.
16. State requirements for employers of agricultural labor.

OBJECTIVE SHEET

17. State methods for payment of Social Security taxes.
18. Match types of tax-sheltered retirement plans to their correct descriptions.
19. Complete an income tax checklist.
20. Complete a ten-month income tax estimate work sheet.

INCOME TAX MANAGEMENT
UNIT XI

SUGGESTED ACTIVITIES

I. Unit contents

   A. Objective sheet

   B. Suggested activities

   C. Supplement #1 — Your Government Dollar

   D. Information sheet

   E. Transparency masters

      1. TM #1 — Why Me, Uncle Sam?

      2. TM #2 — The 1983 Government Dollar

      3. TM #3 — Think Taxes Throughout the Year

      4. TM #4 — Income Tax Management

   F. Assignment sheets

      1. Assignment Sheet #1 — Complete an Income Tax Checklist

      2. Assignment Sheet #2 — Complete a Ten-Month Income Tax Estimate Work Sheet

   G. Answers to assignment sheets

   H. Test

   I. Answers to test

II. Instructor's guide

   A. Encourage cooperators to order a current edition of *Farmer's Tax Guide*, Publication 225 and *Your Federal Income Tax for Individuals*, Publication 17 from the Department of the Treasury, Internal Revenue Service, Washington, D.C., or use Publication 1045, Form 23335 and send to Regional IRS Office, Box 2929, Austin, Texas 78769.

   B. Obtain copies of current federal and state income tax tables and schedules.

SUGGESTED ACTIVITIES

C. For current tax update, attend sessions of Oklahoma State University Cooperative Extension Income Tax Institute.

D. Obtain copies of Oklahoma State University Extension current reports on current tax implications and changes.

E. Obtain copy of *Master Tax Guide* from Commerce Clearing House, Inc., Chicago, Illinois.

F. Make transparencies.

G. Provide cooperators with objective sheet.

H. Discuss unit and specific objectives.

(NOTE: This unit is not intended to be all-inclusive. For maximum effectiveness, instructors should personalize this unit for their own area and for their cooperators' income tax situations.)

1. Emphasize why the income tax system is important. Point out how we as individuals cannot provide services, but as a group we can. Examples of services include the highway system, public education, human and social services, public safety, national defense, and public health services.

2. Use Transparency #1 "Why Me, Uncle Sam," Transparency #2 "The Government Dollar," and Supplement #1 to illustrate the federal government's role in collecting and distributing the people's tax dollars.

I. Provide cooperators with information and assignment sheets.

J. Discuss information and assignment sheets.

(NOTE: This unit may take more than one class period to complete.)

1. When discussing Objective 1, point out the importance of defining terms for common understanding. Use Transparency #3, "Think Taxes Throughout the Year," to emphasize that income tax management planning is a year-round process.

2. When discussing Objective 2, use Transparency #4, "Income Tax Management," to illustrate the purpose of income tax management and planning.

3. Point out when discussing Objective 3 that good records are needed for efficient farm management and that such records are useful in preparing credit applications and income tax returns.

SUGGESTED ACTIVITIES

4. Discuss Objective 4 pointing out that the cash and accrual income tax accounting methods are the only methods accepted by the Internal Revenue Service. Explain that most farmers and ranchers use the cash method for income tax reporting, but that farmers and ranchers also use inventories to determine net worth and income statements and to complete whole farm and detailed enterprise analyses.

5. Discuss Objective 5, emphasizing the importance of completing each step before determining income tax management strategies.

6. Discuss Objective 6. Use the *Record Book* forms to point out where the different types of tax information may be found. Have cooperators complete Assignment Sheets #1 and #2, using their farm or ranch records. Additional assistance may be required during the on-farm instruction. Use current federal and state income tax schedules.

7. Discuss Objective 7. Consult the *Farmer's Tax Guide* for additional dates that may affect individual cooperators.

8. When discussing Objective 8, point out income tax forms that may apply to individual cooperators. Emphasize the the importance of filing Social Security and information returns on time.

9. When discussing Objective 9, emphasize the many special situations that can affect an individual's tax bracket. One situation not listed is the affect on an individual's tax bracket of nonfarm income such as spouse's wages, royalty income, or mineral lease bonuses.

10. When discussing Objective 10, encourage cooperators to discuss strategies they have used. Have cooperators discuss the pros and cons of using each strategy.

11. Discuss Objective 11. Refer cooperators to previous unit on depreciation and to most current information in *Farmer's Tax Guide.* Emphasize that depreciation is a noncash expense. Discuss the affects of the investment tax credit and basis adjustment for depreciation.

12. Discuss Objective 12. If cooperators are confused about the capital gains tax election, have them work the sample problem in the current *Farmer's Tax Guide,* using Form 4749 and Schedule E.

13. Discuss Objective 13. Point out how depreciation and investment tax credit differ. Have cooperators work through the sample problem for investment tax credit in the current *Farmer's Tax Guide.*

14. When discussing Objective 14, emphasize the implications of alternative minimum tax for taxpayers who have large capital gains elections.

SUGGESTED ACTIVITIES

15. Discuss Objective 15. Have cooperators discuss special tax problems affecting their individual situations.

16. When discussing Objective 16, emphasize the importance of keeping accurate, up-to-date hired labor records.

17. Discuss Objective 17. Point out that as an employer of agricultural labor, the cooperator may have to deposit withheld funds periodically during the year.

18. Discuss Objective 18. Encourage cooperators to consult a competent tax consultant or bank officer if they are considering a tax-sheltered retirement plan.

K. Secure names and addresses of various people to contact to acquire farm management advice or income tax information.

L. Invite a competent income tax accountant or tax lawyer familiar with farm and ranch income tax returns to speak to the class.

M. During scheduled on-farm instruction, have cooperators complete the income tax estimate work sheet and do a ten-month income tax estimate. Reemphasize the importance of income tax management and planning throughout the year.

N. Give test.

O. Critique test.

P. Reteach if necessary.

III. Unit references

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B. *Farmer's Tax Guide,* Publication 225. Washington, D.C.: Department of the Treasury, Internal Revenue Service, 1983.

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D. Hardin, Mike L. "1981 (ERTA) and 1982 (TEFRA) Tax Law Effective in 1983." *Oklahoma State University Extension Current Report 757.* Stillwater, Oklahoma: Oklahoma State University Cooperative Extension, 1983.

E. Hardin, Mike L. "1983 Farm Income and Social Security Tax Management." *Oklahoma State University Extension Current Report 758.* Stillwater, Oklahoma: Oklahoma State University Cooperative Extension, 1983.

SUGGESTED ACTIVITIES

F. Hardin, Mike L. "Estimating 1983 Federal and State Income Taxes." *Oklahoma State University Extension Current Report 756*. Stillwater, Oklahoma: Oklahoma State University Cooperative Extension, 1983.

G. Hodgens, Jim and Leland Myers. *Farm Business Management Year I*. Stillwater, Oklahoma: State Department of Vocational and Technical Education/ Curriculum and Instructional Materials Center, 1979.

H. O'Byrne, John C., and Charles Davenport. *Doane's Tax Guide for Farmers*. Indianapolis, Indiana: The Allen Smith Company, 1981.

I. Steward, Jim. *Farm Business Management, Volume II*. Stillwater, Oklahoma: Oklahoma State Department of Vocational and Technical Education/ Curriculum and Instructional Materials Center, 1982.

J. Steward, Jim. *Farm Business Management, Volume III*. Stillwater, Oklahoma: Oklahoma State Department of Vocational and Technical Education/ Curriculum and Instructional Materials Center, 1983.

K. *Social Security for Farmers*. Doane's Agricultural Report #491. St. Louis, Missouri: Doane's Agricultural Service, Inc., 1983.

L. *Tax Guide for Small Business*, Publication 334. Washington, D.C.: Department of Treasury, Internal Revenue Service, 1983.

M. *Your Federal Income Tax for Individuals*, Publication 17. Washington, D.C.: Department of the Treasury, Internal Revenue Service, 1983.

SUGGESTED ACTIVITIES

SUPPLEMENT #1 — YOUR GOVERNMENT DOLLAR

From the Executive Office of the President
Office of Management and Budget

Introduction

Each January the President is required to submit to the Congress his budget proposal for the upcoming fiscal year. The budget sets forth the President's proposed financial plan of operation for the federal government. The plan includes recommendations for new legislative proposals as well as recommendations to change or maintain existing activities.

The Congress can change, eliminate, and add programs to the President's budget. The Congress enacts many separate spending and revenue bills. In addition, the Congress enacts resolutions setting ceilings or targets for total spending and a floor for total receipts.

Fiscal Year 1983 Budget

In fiscal year 1983 (which began on October 1, 1982, and ended on September 30, 1983), federal outlays were $795.9 billion, and receipts were $600.6 billion, leaving a deficit of $195.4 billion.

The budget deficit is financed largely by government borrowing from the public. The government borrows from the public by selling bonds and other debt securities to private citizens, banks, and other businesses.

Your Government Dollar

Income and social insurance taxes are, by far, the largest sources of federal revenues. In 1983, individuals paid $288.0 billion in income taxes and corporations paid $37.0 billion in corporation income taxes. Social security and other insurance and retirement taxes and contributions were $209.0 billion. Excise taxes accounted for $35.3 billion of receipts and the remaining $30.3 billion was accounted for by Federal Reserve deposits, custom duties, estate and gift taxes, and other miscellaneous receipts.

Government revenues provide a wide range of public services. The following is a breakdown of how the federal dollar was spent in 1983.

National defense: $210.5 billion. In 1983, the federal government spent 26 cents of each dollar to equip and modernize our armed forces, pay salaries and retirement benefits of military personnel, and for defense-related atomic energy activities.

International affairs: $8.9 billion. About 1 cent of each federal dollar was spent to provide economic, military, and technical assistance to other nations, to fund the administration of foreign affairs and international organizations, and to maintain foreign exchange and information programs abroad.

General science and space: $7.8 billion. One cent of each dollar was spent to expand scientific knowledge through general science and basic research, including space exploration, and to develop worthwhile uses of space technology.

Energy: $4.0 billion. In 1983, ½ cent of every dollar was spent to support the development of domestic energy supplies and to promote energy research and information programs.

Natural resources and environment: $12.7 billion. Programs to control pollution, develop water resources, and to maintain and conserve public lands and recreation areas took 1½ cents of each federal dollar.

Agriculture: $22.2 billion. About 3 cents of every dollar was spent to stabilize farm income, encourage agricultural research, for food inspection and conservation services, and for the creation and maintenance of grain reserves.

Commerce and housing credit: $4.7 billion. Less than 1 cent of each federal dollar was spent to ensure an adequate supply of mortgage credit, provide the federal payment to the Postal Service, and provide oversight and assistance to small businesses.

Transportation: $21.2 billion. The federal government provides grants to state and local governments for highways, mass transit, and airports. In addition, the federal government maintains the Coast Guard, regulates federal airways, and provides financial assistance to railroads and shipping. These programs took 3 cents of each dollar in 1983.

Community and regional development: $7.3 billion. The federal government provides grants and loans to develop urban and rural areas and to provide relief and insurance to victims of natural disasters. These programs took about 1 cent of each dollar in 1983.

Education, training, employment, and social services: $25.7 billion. In 1983, 3 cents of each dollar went for grants to elementary, secondary, and vocational education and aid to college students; training and employment services; and grants to states for social services.

Health: $81.2 billion. The federal government finances health care for the aged and poor through medicare and medicaid payments. The government also provides funds for the training of health professionals, medical research, and consumer and worker safety. Outlays for these programs took 10 cents of every budget dollar.

Income security: $280.2 billion. These programs provide benefits in the form of social security, unemployment compensation, retirement, and disability payments that are financed by taxes specifically levied for them. In addition, income support is provided for the needy in the form of cash benefits, food stamps, and housing subsidies. These programs took 35 cents of every budget dollar in 1983.

Veterans benefits and services: $24.8 billion. Veterans programs provide income to veterans and their families, medical services, education and training, and life insurance programs. Outlays for veterans programs took 3 cents of each dollar in 1983.

Administration of justice: $5.0 billion. Enforcing federal laws, providing detention and correctional facilities for people charged with or convicted of violating federal laws, and providing financial support for state and local government criminal justice systems took less than 1 cent of every federal dollar spent in 1983.

General government: $5.0 billion. The activities of the executive and legislative branches, and managing government finances and internal government services took less than 1 cent of each dollar.

General purpose fiscal assistance: $6.3 billion. Federal funds are provided for state and local governments to spend as they see fit with few federal restrictions and requirements. These outlays took about 1 cent of every federal dollar in 1983.

Net interest: $87.0 billion. Interest payments on the public debt less the portion paid to trust funds and other net interest received took 11 cents of each dollar.

Undistributed offsetting receipts: $18.6 billion. These offsetting collections are primarily for rents and royalties on the Outer Continental Shelf and Employer Share, employee retirement

Notes:
1. Detail may not add to totals due to rounding.
2. Amounts shown are preliminary budget figures. Final figures may be found in the *U.S. Budget in Brief*, which may be bought from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Source: *Your Federal Income Tax for Individuals*, Publication 17: 1983 Edition.

INCOME TAX MANAGEMENT
UNIT XI

INFORMATION SHEET

I. Terms associated with income tax management

A. Income tax management — Year-round process in which a cooperator constantly makes decisions that can have a large impact on the amount of income taxes to be paid at year's end

B. Income tax planning — Summary of primary income tax considerations in determining when, how to, and whether or not to conduct various business and personal transactions

C. Tax basis — Relating to taxable gains, that part of the sale price that represents the owner's investment in the property

(NOTE: Included is the original cost of the property, plus the cost of capital improvements added during the period of ownership, adjusted by any amount of depreciation claimed.)

EXAMPLE:	Original price (2-ton truck)	$10,000
	Cost of improvements (bed and winch)	+ $ 8,000
		$18,000
	Depreciation	– $10,000
	Tax basis	$ 8,000
	Selling price	$40,000
	Tax basis	–$ 8,000
	Taxable gain	$32,000

D. Amortization — Repayment of a loan in a regular series of payments over a specified period of time

E. Farmer — Individual, partnership, or corporation that cultivates, operates, or manages a farm for gain or profit either as an owner or tenant

(NOTE: You may qualify as a farmer, under IRS guidelines, if at least two-thirds of your total gross income, which includes nonfarm income, is from farming.)

F. Self-employed — Pertaining to a person who operates his or her own business

G. Schedule F — Tax form used with Form 1040 to complete farm income and expenses

H. Income tax — Tax on the taxable income of an individual or business

INFORMATION SHEET

I. Itemized deductions — Deductions from adjusted gross income

EXAMPLES: Medical and dental expenses, interest and taxes paid on personal residence, contributions to charity

J. Adjusted gross income — Individual's total income, minus any adjustments

(NOTE: Adjustments may include moving expenses, employee business expenses, payments to a tax-sheltered retirement plan, alimony paid, married couple deduction, disability income exclusion, and penalty for early withdrawal of funds from certain savings deposits.)

K. Taxable income — Adjusted gross income, minus any partial deduction for charitable contributions, minus exemptions

L. Capital asset — Everything owned and used for personal purposes, pleasure, or investment

EXAMPLES: Stocks or bonds held in personal account, a dwelling owned and occupied by you and your family, household furnishings, farm equipment, stamp collection, commodity futures contract, family car

M. Capital expenditure — Amount paid, or debt incurred, for the acquistion, improvement, or restoration of an asset having a useful life of more than one year

(NOTE: Capital expenditures are generally not deductible, but they may be depreciable.)

N. Self-employment tax — Tax on self-employment income to provide Social Security and Medicare coverage

II. Purposes of income tax management and planning

A. Maximizing after-tax income

B. Holding to a minimum tax liabilities resulting from transactions

C. Controlling tax if time and method of carrying out transactions are determined by cooperator

D. Establishing proof of proper accounting and bookkeeping procedures for an IRS audit

III. Reasons for keeping good records in income tax management

A. To identify source of receipts

INFORMATION SHEET

- B. To keep track of deductible expenses
- C. To figure depreciation allowances and investment credits
- D. To take advantage of capital gain and loss laws
- E. To record credit account balances
- F. To show Social Security withholdings and payments for hired labor
- G. To figure earnings for self-employment Social Security tax and income tax
- H. To support items reported on individual income tax return

IV. Advantages and disadvantages of income tax accounting methods

- A. Cash method
    - 1. Advantages
        - a. Inventory records are not necessary
        - b. Cooperator can control when to incur income and deduct expenses
        - c. Calculations are based on cash flow rather than projected inventory values
    - 2. Disadvantages
        - a. Income may be erratic

          (NOTE: An unusually good year can balloon income into a higher tax bracket.)
        - b. Expenses are not deductible until paid
        - c. Inventory adjustments must be made to determine net farm income
- B. Accural method
    - 1. Advantages
        - a. Farm income levels out without year-end manipulations
        - b. Cost of farm production can be deferred until the product's sales income is received

INFORMATION SHEET

c. More accurate record keeping is required than that for cash method

2. Disadvantages

a. Records may be complex and time consuming

b. Calculations are more difficult to understand than those for cash method

(NOTE: Calculations are based on projected inventory values rather than actual cash flow dollars.)

c. Actual cash position is difficult to determine

V. Guidelines for determining when to use income tax management strategies

A. Determine your normal income tax pattern for the past five years

(NOTE: A cooperator who has a steady increase in income may be moving gradually into higher tax brackets. On the other hand, the trend could be downward or the income level may change little.)

B. Select income tax management methods that will help you come as close as possible to a normal tax pattern

(NOTE: It is costly in terms of after-tax dollars to fluctuate among different income tax brackets.)

C. Think "taxes" throughout the entire year

(NOTE: A good farm manager will be aware of tax consequences during all twelve months so that day-to-day decisions result in the greatest tax advantage consistent with maximum after-tax income.)

D. Use an income tax estimate work sheet

VI. Types of records and information needed to fill out a ten-month income tax estimate work sheet (Assignment Sheets #1 and #2)

A. Ordinary farm receipts

B. Receipts from sales of items purchased for resale

C. Purchase-cost of resale items sold

D. Capital sales that qualify for capital gains

E. Capital sales that do not qualify for capital gains

INFORMATION SHEET

F. Nonfarm income

G. Farm expenses

H. Depreciation records

I. Capital purchases

J. Personal exemptions, nonfarm and itemized deductions, and amounts of each

K. Amount of federal gas tax credit

L. Investment tax credit information

M. Social Security information

N. Deductions for self-employment retirement programs

O. Current year's federal and state income tax tables

(NOTE: The cooperator should obtain the most recent IRS Publication 225, *Farmer's Tax Guide*, and Publication 17, *Your Federal Income Tax*, for the latest information available. Also obtain the most recent information on state income taxes.)

VII. Important filing dates for federal income tax returns

(NOTE: Assume that the tax year starts January 1, and that at least two-thirds of your total estimated gross income, which includes nonfarm income, for this year is from farming; or at least two-thirds of the total gross income, which includes nonfarm income, shown on your return last year was from farming.)

A. By January 15 — File an estimate of your tax and pay this amount; then by April 15, file your current return and pay balance

B. On or before March 1 — File your current return and pay the tax

C. On or before January 31 — File employer reports and information returns

VIII. Uses of income tax forms usually used by farmers and ranchers

(NOTE: There are several forms used by farmers and ranchers other than those listed.)

A. Form 1040 — Used to calculate individual's income tax return

B. Schedule F (Form 1040) — Used for listing all farm income and deductions and determining net farm profit or loss

INFORMATION SHEET

C. Schedule SE (Form 1040) — Used for figuring Social Security self-employment tax

D. Schedule D (Form 1040) — Used for reporting gains and losses from sales of capital assets

E. Form 4562 — Used to explain deductions for depreciation and amortization

F. Form 4797 — Used to report gains and losses from the sale or exchange of business property and from certain involuntary conversions

G. Form 3468 — Used for figuring investment credit

H. Form 4136 — Used for figuring credit for federal fuel tax on gasoline, special fuels, and lubricating oil

I. Form 943 (Employer's Annual Tax Return for Agricultural Employees) — Used for reporting Social Security and income tax withholdings on farm wages paid

J. Schedule A (Form 1040) — Used for listing nonbusiness itemized deductions

K. Schedule B (Form 1040) — Used to report interest and dividend income

L. Schedule C (Form 1040) — Used for listing income and expenses and determining net profit or loss from a nonfarm business

M. Schedule E (Form 1040) — Used to report income or losses from rents and royalities, partnerships, estates and trusts, and subchapter S corporations

(NOTE: Form 1065 must be filed for all farm partnerships.)

N. Forms 1099 — Used to report total payments of $600 or more made during the year to another person in the course of trade or business

(NOTE: Forms 1099 are information returns sent to persons to whom you paid $600 or more.)

O. Form 1096 — Used to summarize and transmit to IRS the various 1099 forms

P. Form W-2 (Wage and Tax Statement) — Used by employer to report employee's wages and deductions

(NOTE: Employer sends Copy A of each Form W-2 to the Social Security Administration with a completed W-3, Transmittal of Income and Tax Statements.)

INFORMATION SHEET

Q. Form 4255 — Used for figuring tax from recapture of investment credit

IX. Special tax situations that can affect an individual's tax bracket

(NOTE: These special situations may have significant tax implications.)

A. Change in type of business

EXAMPLE: If a son is entering the business, a sole proprietorship may be changed to a partnership or a corporation.

B. Major business expansion

(NOTE: Enlarging the business usually means a large capital investment in both depreciable and nondepreciable property. It is important to know how fast these investments can be recovered, what the effect will be on cash flow, and whether capital gain can be created from future sales of the acquired property. There also may be investment credit and depreciation implications.)

C. Estate planning

EXAMPLES: Transfer of ownership from one generation to the next; implications of gift, estate, and income taxes

D. Improvement in labor management practices

EXAMPLE: Improved fringe benefits and bonus plans for key employees

(NOTE: Increased efficiency in farm labor use can often be attained with better labor management practices.)

E. Tax advantages of leasing or renting major equipment as an alternative to outright purchase

F. Sale of capital items

EXAMPLES: Farm land, herd of dairy or breeding livestock, mineral rights or deposits

G. Planning for retirement

EXAMPLE: Postponing income until retirement years by investing in an approved retirement plan

H. Nonfarm investments

(NOTE: Evaluate advantages and disadvantages of investing more in farm investments rather than in nonfarm investments.)

INFORMATION SHEET

X. Income tax management strategies used to increase or decrease taxable income

(NOTE: Income tax management strategies should only be used if consistent with other good farm-management decisions. Strategies assume that the cooperator is a cash-method taxpayer. The cooperator should consider strategies as a method of leveling income from year to year.)

A. To increase taxable income

1. Postpone expenditures and investments until after beginning of next fiscal year
2. Sell marketable grain and livestock before end of fiscal year
3. Work with suppliers to pay bills after beginning of next fiscal year
4. Use alternative ACRS depreciation
5. Forego expense election for depreciable property
6. Do some off-farm or custom work

B. To decrease taxable income

1. Postpone some sales to next year
2. Use income averaging technique if applicable
3. Buy needed machinery, equipment, and other supplies before end of fiscal year to get investment credit and depreciation
4. Use regular ACRS depreciation
5. Use expense election for depreciable property
6. Use deferred sales contracts
7. Make advanced purchases of feed and fertilizer

XI. Facts to remember about depreciation

A. Cost of asset is recovered over useful life of asset

(NOTE: The shorter the life assigned to the asset, the quicker the tax benefit is received.)

INFORMATION SHEET

B. Purchased breeding, draft, or dairy livestock may be depreciated

C. Raised livestock may not be depreciated when cash method is used because all costs were deducted as paid expenses

D. Nonbreeding livestock in inventory may not be depreciated

(NOTE: For accrual-method taxpayers, IRS regulations require all depreciable animals to be either included or excluded from inventory. The cooperator may not include some and exclude others.)

E. Under the Economic Recovery Tax Act of 1981, salvage value will be ignored

(NOTE: Depreciation is referred to as *Accelerated Cost Recovery System* or *ACRS*. ACRS creates five classes of assets, three of which are applicable to agriculture. Consult the IRS *Farmer's Tax Guide* for more information.)

F. Use of expense election will affect cost recovery

XII. Facts to remember about capital gains tax

(NOTE: The amount of capital gain or loss from the sale of a capital asset is the difference between the selling price and the adjusted basis. A sale or exchange of a capital asset will usually result in either a short-term or a long-term gain or loss, depending on the amount of time the property is held.)

A. Under the Revenue Act of 1978, a noncorporate taxpayer may exclude from gross income 60 percent of the amount of any capital gain for the taxable year; the remaining 40 percent of the net capital gain is included in gross income and subject to tax

B. Capital gains and losses are calculated on Forms 4794 and Schedule D

C. To be eligible for capital gains treatment, livestock must be held for a minimum amount of time

EXAMPLES: Cattle and horses, regardless of age, held for draft, breeding, dairy, or sporting purposes must be held twenty-four months; other livestock, regardless of age, must be held twelve months

D. Other items eligible for capital gains treatment include depreciable property used in the farm business, real estate used in farming, and unharvested crops on land used in farming—if the crop and land are sold, exchanged, or involuntarily converted

INFORMATION SHEET

E. To determine gain or loss on the sale or disposition of property, the cooperator must not only know original basis but additions or subtractions that must be made for the time the property has been held

(NOTE: Additions or subtractions are known as *adjustments to the original unadjusted basis*. Allowable deductions that will reduce the basis include depreciation and the costs associated with casualty or similar losses. There are four types of original basis: cost, fair market value, transferred and substituted. Before capital gains tax can be computed, basis on the property in question must be determined.)

XIII. Facts to remember about investment tax credit

(NOTE: The IRS *Farmer's Tax Guide* should be consulted for the most current information.)

A. Allows direct deduction from cooperator's income tax liability

B. Encourages investment in qualified equipment

C. Requires qualifying asset to have a useful life of at least three years to be eligible for any credit

EXAMPLES: Corn cribs, grain storage bins, milk storage refrigerators and freezer structures, potato storage facilities, propane gas tanks, refrigerated portion of a building, silos, storage facilities for grain or other commodities, gasoline storage tanks and pumps, water pumps, drain tiles or other improvements used to reclaim land for agricultural purposes which are depreciable, fences used to confine livestock, paved barnyards, well providing water for farm livestock, contained feedlot facilities, underground watering systems, automatic egg houses, peanut sheds

D. Requires property to be depreciable or amortizable

E. Qualifies purchased breeding livestock

F. States that buildings and their structural components generally are not eligible

G. Qualifies special-purpose structures that use or house property used as an essential part of farming where the structure is so closely related to the use of the property that it is expected to be replaced when the property it houses is replaced

(NOTE: An indication of a special-purpose structure is that the structure cannot be used economically for any purpose other than that related to the property it houses.)

INFORMATION SHEET

H. Limits investment tax credit to the tax liability up to certain maximum amounts

I. If the amount of credit in any year exceeds the limit imposed, the excess may be carried back three preceding tax years; if the amount is still unused in those years, it may be carried forward to the fifteen succeeding years

J. If assets for which investment tax credit was taken are disposed of prior to the end of the estimated useful life used in computing credit, requires that credit be recomputed using the period of time that asset was actually held

K. Requires accurate records to be kept to claim these tax credits

(NOTE: Month and tax year in which the property was placed in service, estimated useful life used in calculating the credit, adjusted tax basis of the property, date of acquisition, and date of disposition must be kept.)

XIV. Characteristics of alternative minimum tax

A. Applied to individuals, trusts, and estates

B. Figured on benefits received from tax preference items

EXAMPLES: Dividend exclusion, All-Savers exclusion, untaxed part of a net long-term capital gain, accelerated depreciation on real property, accelerated depreciation on leased personal property, percentage depletion more than adjusted basis in property, certain excess itemized deductions, amortization of certified pollution-control facilities, intangible drilling and development costs, mining exploration and development costs, circulation costs, research and experimentation costs, and inventive stock options

XV. Descriptions of special tax considerations

A. Land-clearing costs — Deduction of expenditures incurred during the taxable year in the clearing of land to make it suitable for farming

(NOTE: This deduction is limited in any one taxable year to the lesser of $5,000 or 25 percent of taxable income from farming.)

B. Soil and water conservation expenses — Deduction of expenditures made for the treatment or movement of earth; the construction, control, and protection of waterways; the eradication of brush; and the planting of windbreaks

(NOTE: This deduction is limited to 25 percent of the gross income derived from farming.)

INFORMATION SHEET

C. Net operating loss — Net loss from the operation of the farm during the taxable year is fully deductible from the farmer's income from any other source if certain conditions are met

(NOTE: The unused portion of a net operating loss may be carried back three years and forward fifteen years. Net operating loss is computed with certain modifications. Consult *Farmer's Tax Guide* for current information.)

D. Income averaging — Method of taxing current high income as if it had been received in the current year and in the prior three years

XVI. Requirements for employers of agricultural labor

A. Must have an Employer's Identification Number

(NOTE: An Employer's Identification Number is used on all forms reporting the employer's Social Security tax payments.)

B. Must keep records

(NOTE: Record information should include name and social security number, cash wage payments to employee, daily records of time worked and basis of payment, and amount deducted as employee tax.)

C. Must withhold tax from employee's wages

D. Must make reports

(NOTE: Every employer who pays taxable wages for agricultural labor must make a return on Form 943—Employer's Tax and Information Return for Agricultural Employees—before January 31, after the wages are paid. A Form W-2 must be provided to each employee by January 31, each year.)

E. Must pay the tax levied upon employer and employee

(NOTE: The cash amount of taxes—employer and employee share—for agricultural labor must be deposited in a government depositary. The rules, forms, and instructions may be obtained from the District Director of Internal Revenue Service.)

XVII. Methods for payment of Social Security taxes

A. If you are employed, your contribution is deducted from your wages each payday

INFORMATION SHEET

B. If you are self-employed and your net earnings are $400 or more in a year, you must report your earnings and pay your self-employment contribution each year when you file your individual income tax return

(NOTE: Self-employment taxes must be paid even if no income tax was due.)

XVIII. Types of tax-sheltered retirement plans

(NOTE: For each of these plans, the annual contribution to the plan is deductible; the earnings of the fund are not currently taxable and no income will be reported until there is a distribution from the plan sometime in the future. There are penalties for early withdrawal.)

A. Individual Retirement Account (IRA) — May be established by an individual even though an additional plan is in effect; an extra contribution may be made for a nonworking spouse

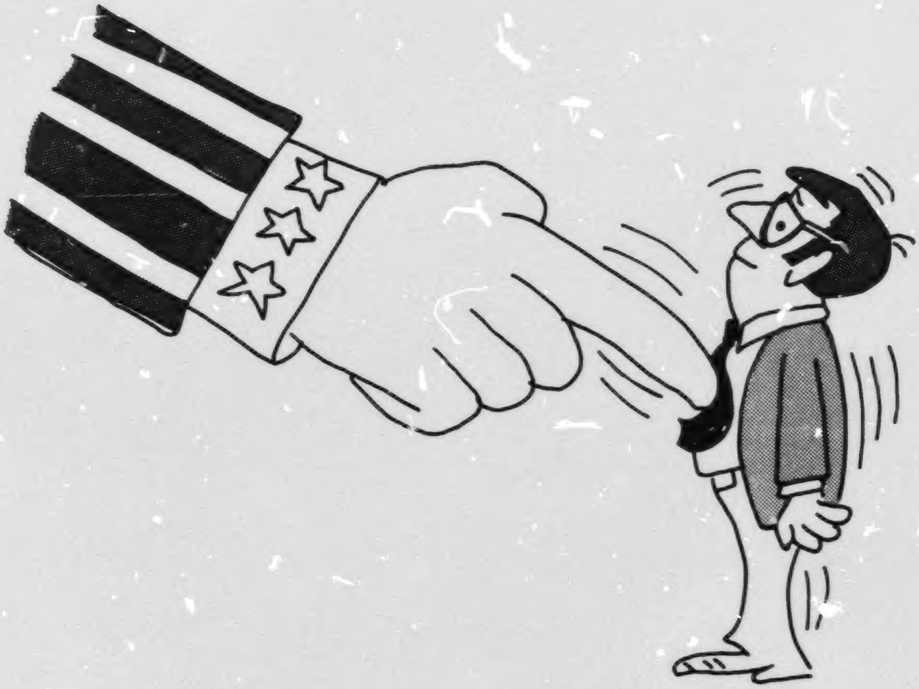
B. Keogh Plan (HR-10) — May be established by self-employed persons for benefit of themselves and their employees if any

C. Simplified Employee Pension Plan (SEP) — May be established by an employer to make annual payments to an employee's or partner's IRA

D. Qualified Retirement Plan — May be established by a corporation for benefit of employees, including employees who are also shareholders

FBM I - 831

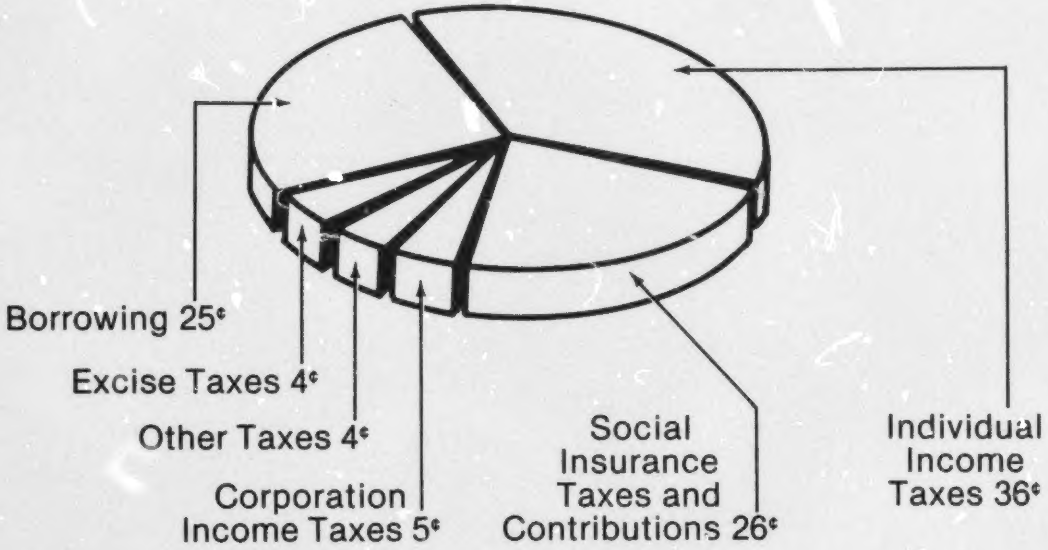
Why Me, Uncle Sam?



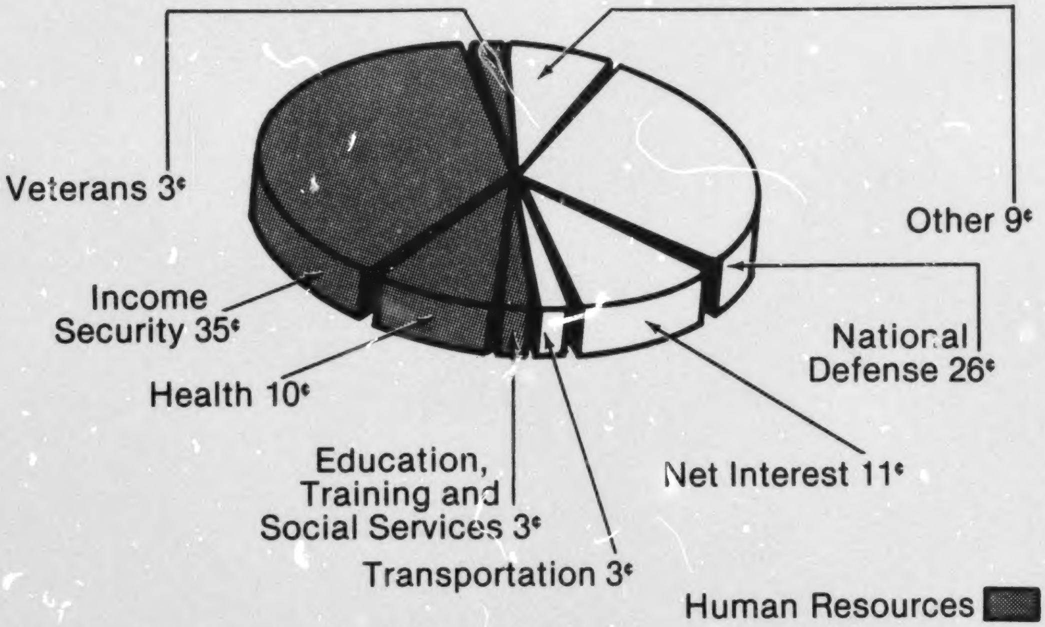
TM #1

The 1983 Government Dollar

Where It Came From:



Where It Went:



Source: *Your Federal Income Tax For Individuals*-Publication 17.

FBM I - 835

Think Taxes Throughout the Year

TM #3

Income Tax Management

Objective: Minimize income taxes while maximizing after-tax income.

INCOME TAX MANAGEMENT
UNIT XI

ASSIGNMENT SHEET #1 — COMPLETE AN INCOME TAX CHECKLIST

NAME ______________________________ SCORE ______________

As is the case in most businesses, farming has certain tax problems peculiar to it. The tax problems arise from a variety of nontax business, regulatory, and weather considerations: government restrictions and subsidies, the weather, special inventory methods, sharecropping, Commodity Credit Corporation loans, and preparation and development of land before it becomes productive.

The Tax Code provides certain tax alternatives or tax-saving opportunities that remove some of the inequities that would otherwise exist.

The purpose of this assignment sheet is to provide a checklist of potential errors common to farmers and ranchers. Write the appropriate response for your farm situation in the spaces provided.

INCOME TAX CHECKLIST FOR FARMERS AND RANCHERS

	YES	NO	N/A	COMMENTS
Are you aware of new income tax changes?				
Have you purchased a farm this taxable year? (NOTE: If yes, consider the importance of allocating costs to land, growing crops, dwelling.)				
Have you had any involuntary conversions this year? (NOTE: If yes, explore tax consequences of replacing with similar-type property.)				
Have you sold easement or right-of-way this year?				
Have you accounted for all barter income for services rendered?				
Have you included all cash income received for goods and services?				
Have you accounted for all products used in the home?				

ASSIGNMENT SHEET #1

	YES	NO	N/A	COMMENTS
Are you sure that CCC loans have not been counted as income twice? (NOTE: Loans may have been counted in one year when borrowed and next year when crop is sold.)				
If you used the cash method, did you deduct the cost of purchased livestock that have strayed or died, or purchased livestock that have been lost or stolen this year?				
Did you deduct the *farm* share of all auto, utility, telephone, and insurance expenses as actually used in farm business?				
Did you itemize on bank deposit slips all gifts and borrowings so that they will not be considered as taxable income?				
Did you keep a record of all medical, dental, and hospital bills, including medical mileage and premiums for accident and health insurance?				
Did you keep an exact record of date of purchase, cost, and date of sale of all items purchased for resale?				
Did you keep an exact record of Social Security tax paid on wages of hired help?				
Will Form 943 and your employees' W-2 forms be filed in a timely manner?				
Do you keep all "paid" receipts, invoices, and cancelled checks for at least five years, including checks for payment of income tax?				
Do you keep for at least five years as evidence of purchase receipts for purchases of items on which investment credit was taken?				
Do you keep vouchers for improvements as long as property is held?				
Are you taking full advantage of capital gains?				

ASSIGNMENT SHEET #1

	YES	NO	N/A	COMMENTS
Are you making maximum use of investment credit and depreciation?				
Should you consider an IRA or Keogh plan?				
Should you consider income averaging?				
Should you consider the alternative method of paying Social Security tax?				
Do you have the information available to complete the appropriate 1099 forms?				
Do you have a record of rents and royalities received? (NOTE: If yes, obtain Form 6248, Windfall Profits Tax.)				
If you have capital gains, investment credit, or claim accelerated ACRS on leased property, are you aware of the alternative minimum tax?				

INCOME TAX MANAGEMENT
UNIT XI

ASSIGNMENT SHEET #2 — COMPLETE A TEN-MONTH INCOME TAX ESTIMATE WORK SHEET

NAME ______________________________ SCORE ____________

The timing of your transactions can play an important part in balancing income between years, thus minimizing fluctuations in income and taxes. Cash-basis operators may make an adjustment in the last few weeks of the year to bring income more in line with past and future expectations.

Use the following work sheets to assist you in completing an income tax work sheet. After determining where you are financially, compare your findings with tax management objectives, and make adjustments as necessary.

ASSIGNMENT SHEET #2

ACCOUNTING PERIOD ______________________ To ______________

COOPERATOR'S NAME ______________________ SS# ______________

SPOUSE'S NAME ______________________ SS# ______________

EXEMPTIONS ______________________________________

____

FARM INCOME

Sale of Purchased Items

Description	Amount of Sale	Cost	Profit or Loss
1. Cattle	$	$	$
2. Hogs			
3. ______			
4. ______			

TOTAL PROFIT OR LOSS $ ______________

Sales of Raised Items

Description	Amount	Description	Amount
1. Cattle	$	6. ______	$
2. Calves		7. ______	
3. Sheep		8. ______	
4. Swine		9. ______	
5. ______		10. ______	

TOTAL RAISED SALES $ ______________

Other Farm Income

Description	Amount	Description	Amount
1. Machine work	$	6. Fed. gasoline tax refund	$
2. Patronage divd.		7. State gasoline tax refund	
3. Nonpatronage divd.		8. Other	
4. Ag. program pmts.		9. ______	
a. Cash		10. ______	
b. Materials and services			
5. CCC loans under election (or forfeited)			

TOTAL OTHER $ ______________

GROSS FARM PROFITS $ ______________

ASSIGNMENT SHEET #2

FARM EXPENSES

Description	Amount	Description	Amount
1. Hired labor	$	13. Taxes	$
2. Repairs, maint.		14. Insurance	
3. Interest		15. Utilities	
4. Feed purchased		16. Cash rent	
5. Seeds, plants pchd.		17. Freight, trucking	
6. Fert., lime, chem.		18. Conser. exp.	
7. Machine hire		19. Land clearing	
8. Supplies pchd.		20. Benefit plans	
9. Breeding feeds		21. Misc.	
10. Vet. medicine		22.	
11. Fuel and oil		23.	
12. Storage			

TOTAL CASH FARM EXPENSES $__________

DEPRECIATION SCHEDULE

Items Purchased

	Date	Description	Total Purchased Price
1.			$
2.			
3.			

Items Traded

	Date	New Item	Old Item	Total Boot Paid
1.				$
2.				
3.				

Items Sold

	Date	Description	Total Sale Price
1.			$
2.			
3.			

Sale of Capital Items That Qualify for Capital Gain

1. ______________________________
2. ______________________________
3. ______________________________

Sale of Capital Items That Do Not Qualify for Capital Gain

1. ______________________________
2. ______________________________
3. ______________________________

ASSIGNMENT SHEET #2

NONFARM INCOME

Wages (W-2 Forms)

1. Gross wages $__________
2. Federal W/H $__________
3. State W/H $__________
4. FICA W/H $__________

State and Local Income Tax Refunds $__________
Allimony Received $__________
Pension and Annuity Income $__________

Interest Income

	Source	Amount
1.		$
2.		
3.		

Dividend Income

	Source	Amount
1.		$
2.		
3.		

Rent and Royalty Income

	Kind	Total Amt.	Deprec. or Depletion	Other Expenses	Windfall Profits Tax Paid
1.		$	$	$	$
2.					
3.					
4.					

Other Income and Expenses

	Description	Income	Expenses
1.		$	$
2.			
3.			
4.			

ASSIGNMENT SHEET #2

ADJUSTMENTS TO INCOME

(Moving expenses, employee business expenses, payments to IRA or Keogh, interest penalty, alimony paid.)

1. ______________________________
2. ______________________________
3. ______________________________
4. ______________________________

ITEMIZED DEDUCTIONS (PERSONAL)

Medical and Dental Expenses

1. Insurance premiums $__________________
2. Medicine and drugs __________________
3. Doctors, nurses, dentists __________________
4. Hospitals __________________
5. Other __________________
6. ______________________ __________________

(NOTE: Medical and dental expenses are subject to AGI limitations. Consult IRS Publication 17 for more information.)

Taxes

1. State and local income $________
2. Real estate ________
3. State and local gasoline ________
4. General sales $________
5. Personal property ________
6. Other ________

Interest

1. Home mortgage $________
2. Credit and charge cards ________
3. Other ________
4. ____________________ ________
5. ____________________ ________

Contributions

1. Cash w/written evidence $________
2. Other (list) ________
3. ____________________ ________
4. ____________________ ________
5. ____________________ ________

ASSIGNMENT SHEET #2

Casulty or Theft Loss (Explanation)

Miscellaneous Deductions

1. Union dues $
2. Other
3.
4.

CREDITS (WILL I QUALIFY FOR —)

Description	Yes	No	Amount	Fuel	Gallons
1. Contributions to candidates for public office			$		
2. Child and dependent care					
3. Residential energy					
4. Federal fuel tax credit					
5. Other					
6.					

OTHER INFORMATION

1.
2.
3.

ASSIGNMENT SHEET #2

INCOME TAX ESTIMATE WORK SHEET

		Amount to Date ____, __	Estimated Rest of Year	Estimated Year's Total
RECEIPTS:				
Sales of products raised* and miscellaneous receipts:				
Cattle, hogs, sheep, and wool, etc.		$____	____	____
Poultry, eggs, and dairy products		$____	____	____
All crops sales		$____	____	____
Custom work, prorations, and refunds agriculture program payments		$____	____	____
Total sales and other farm income	(1)	$____	____	____
Sales of purchased market livestock†		$____	____	____
Purchase cost (subtract)‡		$____	____	____
Gross profits on sales of purchased livestock†	(2)	$____	____	____
Gross farm profits (Item 1 + 2)	(3)	$____	____	____

FARM EXPENSES:

Hired labor	$____	Fuel and oil	$____
Repairs, maintenance	____	Storage	____
Interest	____	Taxes	____
Feed purchased	____	Insurance	
Seed, plants purchased	____	Utilities	____
Fertilizers, lime	____	Cash rent	____
Machine hire	____	Freight, trucking	____
Supplies purchased	____	Conservation expenses	____
Breeding fees	____	Other Business, Fees	____
Veterinary Medicine	____	Other	____

Total cash farm expenses	(4)	$____	____	____
Depreciation on machinery improvements, dairy and breeding stock	(5)	$____	____	____
Total deductions (Item 4 + 5)	(6)	$____	____	____
Self-employment farm income (Item 3 less item 6)‡	(7)	$____	____	____
Net taxable gain from Schedule D (Sales of dairy and breeding stock, machinery, and other capital exchanges)	(8)	$____	____	____
Taxable nonfarm income	(9)	$____	____	____
Adjusted gross income (Item 7 + 8 + 9)	(10)	$____	____	____
Less ______: Excess itemized deductions**				
($1,000 x ______ personal exemptions)***				
Total non-business deductions and exemptions	(11)	$____	____	____
Taxable income (Item 10 less item 11)	(12)	$____	____	____
Estimated income tax (calculated from applicable tax computation schedule)	(13)	$____	____	____
Less credits: allowable investment credit and carryover, gas tax, income tax withheld, and estimated tax paid	(14)	$____	____	____
Total Income Tax Due (Item 13 less Item 14)	(15)	$____	____	____
Estimated self-employment tax (Item 7 x current rate)	(16)	$____	____	____
TOTAL FEDERAL TAX DUE (Item 15 plus Item 16)	(17)	$____	____	____
ESTIMATED STATE INCOME TAX DUE	(18)	$____	____	____

Date work sheet completed ______________, 19 ___

---

* For accrual method, include sales of all livestock

** Use itemized deductions if larger than zero bracket amount.

*** Exemptions for 1980, see current tax regulations for subsequent years.

† Omit for accrual method.

‡ For accrual method, adjust for change in inventory and new livestock purchases.

Adapted from *Income Tax Management for Farmers*, Southern Farm Management Extension Publication No. 17. Cooperative Extension Service, University of Georgia College of Agriculture.

ASSIGNMENT SHEET #2

INCOME TAX ESTIMATE WORK SHEET

		Amount for Year ____, __
RECEIPTS:		
Sales of products raised* and miscellaneous receipts:		
Cattle, hogs, sheep and wool, etc.		$______
Poultry, eggs and dairy products		$______
All crops sales		$______
Custom work, prorations and refunds agriculture program payments		$______
Total sales and other farm income	(1)	$______
Sales of purchased market livestock†		$______
Purchase cost (subtract)‡		$______
Gross profits on sales of purchased livestock†	(2)	$______
Gross farm profits (Item 1 + 2)	(3)	$______

FARM EXPENSES:

Hired labor	$______	Fuel and oil	$______
Repairs, maintenance	______	Storage	______
Interest	______	Taxes	______
Feed purchased	______	Insurance	
Seed, plants purchased	______	Utilities	______
Fertilizers, lime	______	Cash rent	______
Machine hire	______	Freight, trucking	______
Supplies purchased	______	Conservation expenses	______
Breeding fees	______	Other Business, Fees	______
Veterinary Medicine	______	Other	______

Total cash farm expenses	(4)	$______
Depreciation on machinery improvements, dairy and breeding stock	(5)	$______
Total deductions (Item 4 + 5)	(6)	$______
Self employment farm income (Item 3 less item 6)‡	(7)	$______
Net taxable gain from Schedule D (Sales of dairy and breeding stock, machinery and other capital exchanges)	(8)	$______
Taxable non-farm income	(9)	$______
Adjusted gross income (Item 7 + 8 + 9)	(10)	$______
Less ______: Excess itemized deductions** ($1,000 x ______ personal exemptions)***		
Total non-business deductions and exemptions	(11)	$______
Taxable income (Item 10 less item 11)	(12)	$______
Estimated income tax (calculated from applicable tax computation schedule)	(13)	$______
Less credits: allowable investment credit and carryover, gas tax, income tax withheld, and estimated tax paid	(14)	$______
Total Income Tax Due (Item 13 less Item 14)	(15)	$______
Estimated self-employment tax (Item 7 x current rate)	(16)	$______
TOTAL FEDERAL TAX DUE (Item 15 plus Item 16)	(17)	$______
ESTIMATED STATE INCOME TAX DUE	(18)	$______

Date work sheet completed______________, 19____

---

* For accrual method, include sales of all livestock

** Use itemized deductions if larger than zero bracket amount.

*** Exemptions for 1980, see current tax regulations for subsequent years.

† Omit for accrual method.

‡ For accrual method, adjust for change in inventory and new livestock purchases.

Adapted from *Income Tax Management for Farmers*, Southern Farm Management Extension Publication No. 17. Cooperative Extension Service, University of Georgia College of Agriculture.

INCOME TAX MANAGEMENT
UNIT XI

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1 — Evaluated to the satisfaction of the instructor

Assignment Sheet #2 — Evaluated to the satisfaction of the instructor

INCOME TAX MANAGEMENT
UNIT XI

TEST

NAME ______________________________ SCORE ______________

1. Match to their correct definitions terms associated with income tax management. Write the correct numbers in the blanks. Definitions are continued on the next page.

_____a. Year-round process in which a cooperator constantly makes decisions that can have a large impact on the amount of income taxes to be paid at year's end

_____b. Summary of primary income tax considerations in determining when, how to, and whether or not to conduct various business and personal transactions

_____c. Relating to taxable gains, that part of the sale price that represents the owner's investment in the property

_____d. Repayment of a loan in a regular series of payments over a specified period of time

_____e. Individual, partnership, or corporation that cultivates, operates, or manages a farm for gain or profit either as an owner or tenant

_____f. Pertaining to a person who operates his or her own business

_____g. Tax form used with Form 1040 to complete farm income and expenses

_____h. Tax on the taxable income of an individual or business

_____i. Deductions from adjusted gross income

_____j. Individual's total income, minus any adjustments

_____k. Adjusted gross income, minus any partial deduction for charitable contributions, minus exemptions

1. Farmer
2. Capital expenditure
3. Income tax management
4. Adjusted gross income
5. Income tax planning
6. Self-employed
7. Capital asset
8. Income tax
9. Amortization
10. Tax basis
11. Schedule F
12. Itemized deductions
13. Self-employment tax
14. Taxable income

TEST

_____l. Tax on self-employment income to provide Social Security and Medicare coverage

_____m. Everything owned and used for personal purposes, pleasure, or investment

_____n. Amount paid, or debt incurred, for the acquisition, improvement, or restoration of an asset having a useful life of more than one year

2. Select from the following list the purposes of income tax management and planning. Write an "X" in the blank before each correct answer.

_____a. Increasing demand for farm loan funds

_____b. Maximizing after-tax income

_____c. Holding to a minimum tax liabilities resulting from transactions

_____d. Recognizing profit opportunities in the farm business

_____e. Establishing proof of proper accounting and bookkeeping procedures for an IRS audit

_____f. Controlling tax if the time and method of carrying out transactions are determined by cooperator

3. State reasons for keeping good records in income tax management.

a. ____

b. ____

c. ____

d. ____

e. ____

f. ____

g. ____

h. ____

____

TEST

4. List advantages and disadvantages of income tax accounting methods.

Cash method

a. Advantages

1) ______________________________

2) ______________________________

3) ______________________________

b. Disadvantages

1) ______________________________

2) ______________________________

3) ______________________________

Accrual method

a. Advantages

1) ______________________________

2) ______________________________

3) ______________________________

b. Disadvantages

1) ______________________________

2) ______________________________

3) ______________________________

5. State guidelines for determining when to use income tax management strategies.

a. ______________________________

____

b. ______________________________

____

TEST

c. ____________________

____

d. ____________________

____

6. List eight types of records and information needed to fill out a ten-month income tax estimate work sheet.

a. ____________________

b. ____________________

c. ____________________

d. ____________________

e. ____________________

f. ____________________

g. ____________________

h. ____________________

7. State important filing dates for federal income tax returns.

a. ____________________

____

b. ____________________

____

c. ____________________

____

TEST

8. Match to their correct uses income tax forms usually used by farmers and ranchers. Write the correct numbers in the blanks. Uses are continued on the next page.

______a. Used to calculate individual's income tax return

______b. Used for listing all farm income and deductions and determining net farm profit or loss

______c. Used for figuring Social Security self-employment tax

______d. Used for reporting gains and losses from sales of capital assets

______e. Used to explain deductions for depreciation and amortization

______f. Used to report gains and losses from the sale or exchange of business property and from certain involuntary conversions

______g. Used for figuring investment credit

______h. Used for figuring credit for federal fuel tax on gasoline, special fuels, and lubricating oil

______i. Used for reporting Social Security and income tax withholdings on farm wages paid

______j. Used for listing nonbusiness itemized deductions

______k. Used to report interest and dividend income

______l. Used for listing income and expenses and determining net profit or loss from a nonfarm business

______m. Used to report income or losses from rents and royalities, partnerships, estates and trusts, and subchapter S corporations

______n. Used to report total payments of $600 or more made during the year to another person in the course of trade or business

1. Schedule SE (Form 1040)
2. Schedule F (Form 1040)
3. Form 1040
4. Schedule D (Form 1040)
5. Form W-2 (Wage and Tax Statement)
6. Form 4797
7. Form 943 (Employer's Annual Tax Return for Agricultural Employees)
8. Form 4562
9. Schedule C (Form 1040)
10. Forms 1099
11. Form 4136
12. Schedule E (Form 1040)
13. Form 3468
14. Schedule A (Form 1040)
15. Form 1096
16. Schedule B (Form 1040)
17. Form 4255

TEST

______o. Used to summarize and transmit to IRS the various 1099 forms

______p. Used by employer to report employee's wages and deductions

______q. Used for figuring tax from recapture of investment credit

9. List five special tax situations that can affect an individual's tax bracket.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

10. Distinguish between income tax management strategies used to increase taxable income and those used to decrease taxable income. Write an "I" in the blanks before increase and a "D" before decrease.

______a. Postpone some sales to next year

______b. Use income averaging technique if applicable

______c. Postpone expenditures and investments until after beginning of next fiscal year

______d. Buy needed machinery, equipment, and other supplies before end of fiscal year to get investment credit and depreciation

______e. Sell marketable grain and livestock before end of fiscal year

______f. Work with suppliers to pay bills after beginning of next fiscal year

______g. Use regular ACRS depreciation

______h. Use expense election for depreciable property

______i. Use deferred sales contracts

______j. Use alternative ACRS depreciation

______k. Forego expense election for depreciable property

______l. Make advanced purchases of feed and fertilizer

______m. Do some off-farm or custom work

TEST

11. Select from the following list facts to remember about depreciation. Write an "X" in the blank before each correct answer.

_____a. Cost of asset is recovered over useful life of asset

_____b. Purchased breeding, draft, or dairy livestock may be depreciated

_____c. Direct deduction is allowed from cooperator's income tax liability

_____d. Raised livestock may not be depreciated when cash method is used because all costs were deducted as paid expenses

_____e. Depreciation is figured on benefits received from tax preference items

_____f. Nonbreeding livestock in inventory may not be depreciated

_____g. Under the Economic Recovery Tax Act of 1981, salvage value will be ignored

_____h. Use of expense election will affect cost recovery

12. State three facts to remember about capital gains tax.

a. ____

____

____

____

b. ____

____

____

____

c. ____

____

____

____

TEST

13. Select from the following list facts to remember about investment tax credit. Write an "X" in the blank before each correct answer.

_____a. Uses noncash expense on Schedule F

_____b. Allows direct deduction from cooperator's income tax liability

_____c. Encourages investment in qualified equipment

_____d. Requires qualifying asset to have a useful life of at least three years to be eligible for any credit

_____e. Use of expense election affects cost recovery

_____f. Requires property to be depreciable or amortizable

_____g. Qualifies purchased breeding livestock

_____h. States that buildings and their structural components generally are not eligible

_____i. May exclude capital gains and losses from gross income

_____j. Qualifies special-purpose structures that use or house property used as an essential part of farming where the structure is so closely related to the use of the property that it is expected to be replaced when the property it houses is replaced

_____k. Limits investment tax credit to the tax liability up to certain maximum amounts

_____l. If the amount of credit in any year exceeds the limit imposed, the excess may be carried back three preceeding tax years; if the amount is still unused in those years, it may be carried forward to the fifteen succeeding years

_____m. If assets for which investment tax credit was taken are disposed of prior to the end of the estimated useful life used in computing credit, requires that credit be recomputed using the period of time that asset was actually held

_____n. Allows deduction for expenditures made for treatment or movement of earth

_____o. Requires accurate records to be kept to claim these tax credits

14. State characteristics of alternative minimum tax.

a. ____

TEST

b. ____

15. Match special tax considerations to their correct descriptions. Write the correct numbers in the blanks.

_____a. Deduction of expenditures incurred during the taxable year in the clearing of land to make it suitable for farming

_____b. Deduction of expenditures made for the treatment or movement of earth; the construction, control, and protection of waterways; the eradication of brush; and the planting of windbreaks

_____c. Net loss from the operation of the farm during the taxable year is fully deductible from the farmer's income from any other source if certain conditions are met

_____d. Method of taxing current high income as if it had been received in the current year and in the prior three years

1. Income averaging
2. Land-clearing costs
3. Soil and water conservation expenses
4. Net operating loss

16. State three requirements for employers of agricultural labor.

a. ____

b. ____

c. ____

17. State methods for payment of Social Security taxes.

a. ____

____

b. ____

____

TEST

18. Match types of tax-sheltered retirement plans to their correct descriptions. Write the correct numbers in the blanks.

______a. May be established by an individual even though an additional plan is in effect; an extra contribution may be made for a nonworking spouse

______b. May be established by self-employed persons for benefit of themselves and their employees if any

______c. May be established by an employer to make annual payments to an employee's or partner's IRA

______d. May be established by a corporation for benefit of employees, including employees who are also shareholders

1. Individual Retirement Account (IRA)
2. Qualified Retirement Plan
3. Keogh Plan (HR-10)
4. Simplified Employee Pension Plan (SEP)

(NOTE: Test questions 19 and 20 list the assignment sheets. They are an important part of this test. If they have not been completed, check with your instructor.)

19. Complete an income tax checklist.

20. Complete a ten-month income tax estimate work sheet.

INCOME TAX MANAGEMENT
UNIT XI

ANSWERS TO TEST

1. a. 3
   b. 5
   c. 10
   d. 9
   e. 1
   f. 6
   g. 11
   h. 8
   i. 12
   j. 4
   k. 14
   l. 13
   m. 7
   n. 2

2. b, c, e, f

3. a. To identify source of receipts
   b. To keep track of deductible expenses
   c. To figure depreciation allowances and investment credits
   d. To take advantage of capital gain and loss laws
   e. To record credit account balances
   f. To show Social Security withholdings and payments for hired labor
   g. To figure earnings for self-employment Social Security tax and income tax
   h. To support items reported on individual income tax return

4. **Cash method**
   a. Advantages
      1) Inventory records are not necessary
      2) Cooperator can control when to incur income and deduct expenses
      3) Calculations are based on cash flow rather than projected inventory values
   b. Disadvantages
      1) Income may be erratic
      2) Expenses are not deductible until paid
      3) Inventory adjustments must be made to determine net farm income

ANSWERS TO TEST

Accrual method

a. Advantages

  1) Farm income levels out without year-end manipulations

  2) Cost of farm production can be deferred until the product's sales income is received

  3) More accurate record keeping is required than that for cash method

b. Disadvantages

  1) Records may be complex and time consuming

  2) Calculations are more difficult to understand than those for cash method

  3) Actual cash position is difficult to determine

5. a. Determine your normal income tax pattern for the past five years

   b. Select income tax management methods that will help you come as close as possible to a normal tax pattern

   c. Think "taxes" throughout the entire year

   d. Use an income tax estimate work sheet

6. Answer should include any eight of the following

   a. Ordinary farm receipts

   b. Receipts from sales of items purchased for resale

   c. Purchase-cost of resale items sold

   d. Capital sales that qualify for capital gains

   e. Capital sales that do not qualify for capital gains

   f. Nonfarm income

   g. Farm expenses

   h. Depreciation records

   i. Capital purchases

   j. Personal exemptions, nonfarm and itemized deductions, and amounts of each

   k. Amount of federal gas tax credit

   l. Investment tax credit information

ANSWERS TO TEST

m. Social Security information

n. Deductions for self-employment retirement programs

o. Current year's federal and state income tax tables

7. a. By January 15 — File an estimate of your tax and pay this amount; then by April 15, file your current return and pay balance

   b. On or before March 1 — File your current return and pay the tax

   c. On or before January 31 — File employer reports and information returns

8.	a.	3	f.	6	k.	16	p.	5
	b.	2	g.	13	l.	9	q.	17
	c.	1	h.	11	m.	12		
	d.	4	i.	7	n.	10		
	e.	8	j.	14	o.	15		

9. Answer should include any five of the following

   a. Change in type of business

   b. Major business expansion

   c. Estate planning

   d. Improvement in labor management practices

   e. Tax advantages of leasing or renting major equipment as an alternative to outright purchase

   f. Sale of capital items

   g. Planning for retirement

   h. Nonfarm investments

10.	a.	D	f.	I	k.	I
	b.	D	g.	D	l.	D
	c.	I	h.	D	m.	I
	d.	D	i.	D		
	e.	I	j.	I		

ANSWERS TO TEST

11. a, b, d, f, g, h

12. Answer should include any three of the following

    a. Under the Revenue Act of 1978, a noncorporate taxpayer may exclude from gross income 60 percent of the amount of any capital gain for the taxable year; the remaining 40 percent of the net capital gain is included in gross income and subject to tax

    b. Capital gains and losses are calculated on Forms 4794 and Schedule D

    c. To be eligible for capital gains treatment, livestock must be held for a minimum amount of time

    d. Other items eligible for capital gains treatment include depreciable property used in the farm business, real estate used in farming, unharvested crops on land used in farming—if the crop and land are sold, exchanged, or involuntarily converted

    e. To determine gain or loss on the sale or disposition of property, the cooperator must not only know original basis but additions or subtractions that must be made for the time the property has been held

13. b, c, d, f, g, h, j, k, l, m, o

14. a. Applied to individuals, trusts, and estates

    b. Figured on benefits received from tax preference items

15. a. 2

    b. 3

    c. 4

    d. 1

16. Answer should include any three of the following

    a. Must have an Employer's Identification Number

    b. Must keep records

    c. Must withhold tax from employee's wages

ANSWERS TO TEST

d. Must make reports

e. Must pay the tax levied upon employer and employee

17. a. If you are employed, your contribution is deducted from your wages each payday

    b. If you are self-employed and your net earnings are $400 or more in a year, you must report your earnings and pay your self-employment contribution each year when you file your individual income tax return

18. a. 1

    b. 3

    c. 4

    d. 2

19. Evaluated to the satisfaction of the instructor

20. Evaluated to the satisfaction of the instructor

YEAR-END CLOSING OF RECORDS
UNIT XII

UNIT OBJECTIVE

After completing this unit, the cooperator should be able to complete checklists for closing a record book and transferring to a new record book. The cooperator will show this knowledge by completing assignment sheets and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the cooperator should be able to

1. Match to their correct definitions terms associated with year-end closing of records.
2. Select from a list reasons for keeping accurate, up-to-date records.
3. State ways of finding and correcting errors in records.
4. Arrange in order steps in year-end closing of records.
5. State the purposes of a cash-flow summary.
6. Select from a list the purposes of income tax management and planning.
7. Select from a list guidelines for taking inventory.
8. State the purposes of supplemental records.
9. List types of supplemental records.
10. State the purposes of a net worth statement.
11. Match to their correct definitions terms associated with a net worth statement.
12. Select from a list the purposes of an income statement.
13. Match to their correct definitions terms associated with an income statement.
14. Select from a list the purposes of a whole farm analysis.
15. State the purposes of a detailed enterprise analysis.
16. Arrange in order the steps in transferring to a new record book.
17. State points to remember when setting goals and objectives.

OBJECTIVE SHEET

18. Complete a year-end closing of records checklist.

19. Complete an income tax checklist.

20. Complete a beginning-of-the-year checklist.

21. Evaluate personal performance in attaining farm business and family goals and objectives.

YEAR-END CLOSING OF RECORDS
UNIT XII

SUGGESTED ACTIVITIES

I. Unit contents

   A. Objective sheet

   B. Suggested activities

   C. Information sheet

   D. Assignment sheets

      1. Assignment Sheet #1 — Complete a Year-End Closing of Records Checklist

      2. Assignment Sheet #2 — Complete an Income Tax Checklist

      3. Assignment Sheet #3 — Complete a Beginning-of-the-Year Checklist

      4. Assignment Sheet #4 — Evaluate Personal Performance in Attaining Farm Business and Family Goals and Objectives

   E. Answers to assignment sheets

   F. Test

   G. Answers to test

II. Instructor's guide

   A. Order materials to supplement unit.

      (NOTE: Order additional forms for *Oklahoma Young Farmer Record Book* from Oklahoma State Department of Vocational and Technical Education, Curriculum and Instructional Materials Center, 1500 West Seventh Avenue, Stillwater, Oklahoma 74074.)

   B. Provide cooperators with objective sheet.

   C. Discuss unit and specific objectives.

      1. Emphasize the importance of complete and accurate records for income tax management purposes. Review various income tax forms and their due dates.

         (NOTE: IRS forms and instructions may change during the course of the year. Always use the latest information available.)

SUGGESTED ACTIVITIES

2. Point out that in the *Farm Business Management II* curriculum you will discuss the various financial statements and will assist cooperators in completing whole farm and detailed enterprise analyses of their farm records. Use the comparative analysis for your area of the state to illustrate types of information that can be obtained from the cooperator's records.

D. Provide cooperators with information and assignment sheets.

E. Discuss information and assignment sheets

1. Discuss Objective 1, pointing out the importance of defining terms for common understanding.

2. When discussing Objective 2, emphasize the importance of keeping records throughout the year.

3. Explain when discussing Objective 3 that errors will occur, but that they can be found and corrected. You may wish to point out that if a number is transposed (98 is recorded instead of 89) the sum can be divided by nine to discover the error.

4. Discuss Objective 4. Have cooperators use Assignment Sheet #1 to record when they have completed each step in the year-end closing of records. Explain that several of the steps will be completed after the end of the accounting year. Have cooperators turn in the assignment sheet when the checklist is completed.

5. Discuss Objective 5. Encourage cooperators to complete a cash flow summary of their records.

6. When discussing Objective 6, emphasize that the primary objective of income tax management and planning is to maximize after-tax income. Provide updated information on any new tax law changes. Have cooperators complete Assignment Sheet #2.

7. Discuss Objective 7. Point out the influences that inventories have on net farm income. Show how beginning inventory is considered an expense and ending inventory an income. Stress the importance of physical inventories. An example may be feed fed. If estimates are high, feed fed is overestimated; this indicates a lower level of feed efficiency in livestock. Conversely, low yield estimates cause estimates of feed available to be fed to be underestimated; this indicates that livestock are more efficient in feed utilization than they actually are. Yield and feed records are independent.

8. When discussing Objectives 8 and 9, explain that supplemental records must be accurate and complete before a whole farm analysis or detailed enterprise analysis can be completed. Whole farm and detailed enterprise analyses of the cooperators' farming operations will be discuss in *Farm Business Management II.*

SUGGESTED ACTIVITIES

9. Discuss Objectives 10 and 11. Encourage cooperators to complete a net worth statement for their farming operations. Point out that net worth statements and spread sheets will be discussed in *Farm Business Management II.*

   (NOTE: You may wish to review Unit III, "Inventory and Net Worth Statement.")

10. Discuss Objectives 12 and 13. Encourage cooperators to complete income statements for their farming operations. Explain that income statements will be discussed in greater detail in *Farm Business Management II.*

11. Discuss Objectives 14 and 15. Stress that information obtained on the cash flow summary form, the net worth and income statements, and the supplemental records will be used to complete whole farm and detailed enterprise analyses of their farm operations. Explain the use of the state and school comparative analysis. Point out that the analysis will be discussed in greater detail in *Farm Business Management II.*

12. Discuss Objective 16. Have cooperators use Assignment Sheet #3 to record when they have completed each step in transferring records to a new book. Remind cooperators that they must have complete records in their current record book before transferring to a new book. It may take cooperators a month or two to complete the assignment sheet.

    a. Have cooperators review the following purposes of a cash-flow projection.

       1) Showing cooperator when excess cash is expected to be available and when to expect cash deficits

       2) Making possible a budgeted loan

       3) Providing way for cooperator to plan financially for combined personal and business expenses

       4) Allowing cooperator to examine how farm plan will work in coming year

       5) Providing means to make a sound financial plan at beginning of year

       6) Allowing for timing of purchases and sales for income tax planning

SUGGESTED ACTIVITIES

b. Have cooperators review the following steps in constructing a cash-flow projection.

  1) Plan farm organization for coming year

  2) Estimate amount and timing of cash inflows that are expected to occur throughout coming year

  3) Make necessary calculations, after expected cash inflows and outflows are entered for each period of the year, to determine whether cash position for a given period will be positive or negative

c. Encourage cooperators to develop a cash-flow projection for the coming year for their farming operations. Provide some assistance during an on-farm instruction session if necessary.

(NOTE: You may want to review Unit VII, "Cash Flow Planning.")

14. Use Assignment Sheet #4 when discussing Objective 17. Point out that cooperators were encouraged to write their farm business and family goals and objectives during the orientation class. This assignment sheet is meant to be used as a guide for the cooperator to determine if any goals or objectives have been achieved. Cooperators may wish to rewrite or update their goals. Explain that as some goals and objectives are achieved, others may change or be omitted entirely, and new ones may be added.

F. During scheduled on-farm instruction, have cooperators complete closing of record book and transferring to new record book. Encourage cooperators who have complete and accurate records to complete a net worth statement.

G. Give test.

H. Critique test.

I. Reteach if necessary.

III. Unit references

A. *Farmer's Tax Guide.* Publication 225. Washington, D.C.: Department of the Treasury, Internal Revenue Service, 1983.

B. Hardin, Mike L., and Joesph E. Williams. *Oklahoma Young Farmer Record Book.* Stillwater, Oklahoma: Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1981.

SUGGESTED ACTIVITIES

C. Hodgens, Jim, and Leland Myers. *Farm Business Management Year 1.* Stillwater, Oklahoma: Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1979.

D. James, Sydney C., and Everett Stoneberg. *Farm Accounting and Business Analysis.* Ames, Iowa: Iowa State University Press, 1979.

E. Osburn, Donald D., and Kenneth C. Schneeberger. *Modern Agriculture Management.* Reston, Virginia: Reston Publishing Company, Inc., 1978.

F. Steward, Jim. *Farm Business Management II.* Stillwater, Oklahoma: Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1982.

G. Steward, Jim. *Farm Business Management III.* Stillwater, Oklahoma: Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1982.

H. *Your Federal Income Tax.* Publication 17. Washington, D.C.: Department of the Treasury, Internal Revenue Service, 1983.

YEAR-END CLOSING OF RECORDS
UNIT XII

INFORMATION SHEET

I. Terms associated with year-end closing of records

  A. Net worth statement — Financial statement that lists assets and liabilities of a farm business at a particular time, usually at end of accounting year

  B. Income statement — Financial statement that lists cash and noncash receipts and expenses of a farm business during a specified period of time, usually a year

  C. Cash-flow summary — Financial statement that shows cash received and cash spent during an accounting period

  D. Net worth spread sheet — Form used for comparative analysis of net worth statements from several years

  E. Comparative income statement analysis sheet — Form used for comparative analysis of income statements from several years

  F. Cash-flow projection — Tool of financial analysis estimating flow of cash through farm business

  G. Whole farm analysis — Management tool used to identify factors affecting profitability and efficiency of farm business

  H. Detailed enterprise analysis — Management tool used to identify factors affecting profitability and efficiency of various enterprises

  I. Goals — Purposes for farm business and family in nonquantifiable terms

  (NOTE: Goals are the material and personal aspirations that the cooperator thinks are most important.)

  J. Objectives — Specific, measurable, realistically attainable, constructive aims that represent an improvement over present level of achievement

  (NOTE: Goals are broad, and objectives are specific.)

  K. Tax management — Year-round process whereby cooperators constantly make decisions that can have a large impact on the amount of taxes that will have to be paid at year's end

  (NOTE: The objective of income tax management should be to maximize after-tax income.)

  L. Ratio — Relationship in quantity, amount, or size between two or more things

INFORMATION SHEET

II. Reasons for keeping accurate, up-to-date records

(NOTE: Accuracy is essential when records are used for the cooperator's own analysis purposes or are studied by others. It is also important that these records be maintained as an ongoing process throughout the year.)

A. To verify legal and business transactions

EXAMPLES: Internal Revenue Service audit, credit acquisition

B. To avoid last-minute, end-of-year rush to make sure everything is accounted for

C. To provide accurate, up-to-date analysis of business performance

EXAMPLES: Cash-flow summary, net worth statement, income statement, whole farm and detailed enterprise analyses

D. To reduce chance that incorrect information could be used in reporting tax information

E. To indicate strengths and weaknesses in farm business

III. Ways of finding and correcting errors in records

A. Check all mathematical calculations

B. Determine the most likely places for errors to occur

(NOTE: Most errors occur in the feed fed records, although errors can occur in all areas.)

C. Check to see that transferrals of original figures match those on the actual records

D. Correct any inaccuracies or discrepancies found

(NOTE: Beginning and ending inventory must be corrected if found to be inaccurate.)

IV. Steps in year-end closing of records (Assignment Sheet #1)

A. Complete cash-flow summary

B. Complete hired labor records

C. Complete summary of family living records

D. Complete depreciation schedule

INFORMATION SHEET

E. Complete ending inventory

F. Complete year-end credit records

G. Complete supplemental records

H. Complete net worth statement and spread sheet

I. Complete income statement and comparative income statement analysis sheet

J. Complete whole farm analysis and measures of performance

K. Complete detailed enterprise analysis

L. Analyze performance of farm business

V. Purposes of a cash-flow summary

A. Showing record of actual monthly cash transactions for previous year

B. Checking accuracy of monthly cash balances

C. Providing historical record of cash-flow transactions

D. Determining timing of cash transactions when completing cash-flow projection

E. Providing farm cash income and expense totals for income tax forms

F. Comparing with cash-flow projection

G. Supporting a loan decision

VI. Purposes of income tax management and planning (Assignment Sheet #2)

A. Maximizing after-tax income

B. Holding to a minimum tax liabilities resulting from transactions

C. Controlling tax if time and method of carrying out transactions are determined by cooperator

D. Establishing proof of proper accounting and bookkeeping procedures for an IRS audit

INFORMATION SHEET

VII. Guidelines for taking inventory

A. Count and value all assets and liabilities of the farm business at one specific date

(NOTE: Inventory is usually taken once each year. Inventory marks the end of the current accounting period and the start of the next accounting period.)

EXAMPLE: If inventory is taken on January 5, it would have to be adjusted upward or downward to reflect feed fed, weight, and value of livestock changes between December 31 and January 5 or the normal accounting date.

B. Take at the same time each year

VIII. Purposes of supplemental records

A. Recording materials and resources used by various enterprises or different production practices

B. Showing yield, production, or physical performance of enterprises

C. Adding to financial records

IX. Types of supplemental records

A. Home products

B. Breeding records

C. Mortality records

D. Livestock feeding records

E. Crop and feed balance

F. Livestock production summary

G. Crop records

H. Crop production summary

I. Monthly labor summary

X. Purposes of a net worth statement

A. Measuring present financial position

B. Recording growth in farm business through changes in net worth

INFORMATION SHEET

- C. Providing an indication of amount of debt supported by various classes of assets
- D. Providing early warning through ratio analysis of problems that may arise in short-run, intermediate, and long-run periods
- E. Indicating liquidity and solvency

XI. Terms associated with a net worth statement

- A. Net worth — Value of assets not claimed by individuals or firms outside farm business or owner's claim on those assets
- B. Liquidity — Firm's capacity to generate sufficient cash to meet its financial obligations as they fall due
- C. Solvency — Firm's ability to meet long-run claims against the business
- D. Assets — Items or resources controlled by farm business
- E. Liabilities — Financial claims against farm business
- F. Current ratio — Indicator of farm's ability to meet its short-run payment obligations
- G. Working asset ratio — Measure of farm's solvency over an intermediate time span of one to ten years
- H. Net capital ratio — Indicator of long-run solvency of farm business
- I. Debt-to-equity ratio — Measure of firm's total financial obligations to creditors in relation to capital provided by cooperators
- J. Percent equity ratio — Measure of risk-bearing ability of farm

XII. Purposes of an income statement

- A. Measuring profitability of farm business over specific period
- B. Making profit and loss sources easier to identify
- C. Showing disposition of net farm income

XIII. Terms associated with an income statement

- A. Receipts — Cash income flowing into farm business
- B. Expenditures — Cash flowing out of farm business

INFORMATION SHEET

C. Unpaid labor — Labor contributed by operator and farm family to operation of farm business

D. Net farm income — Monetary value available for family living, income taxes, debt retirement, increased equity in business, nonfarm investment, or other savings

XIV. Purposes of a whole farm analysis

A. Providing insights into farm business

B. Identifying factors affecting profitability and efficiency of farm business

C. Helping cooperator make better management decisions when farm records are kept over several years

D. Allowing cooperator to compare entire farm business with various comparison standards

EXAMPLES: State and area comparative analyses

XV. Purposes of a detailed enterprise analysis

A. Estimating level of profitability

B. Identifying factors affecting profitability

C. Determining relative efficiency and profitability of enterprises

D. Indicating enterprises that could be increased or decreased to increase profits

E. Helping cooperator make management decisions when enterprise records are kept over a number of years

F. Analyzing specific enterprises

XVI. Steps in transferring to a new record book (Assignment Sheet #3)

A. Record beginning inventory

B. Record beginning depreciation schedule

C. Record beginning credit records

D. Record beginning cash balance

E. Record beginning net worth statement

INFORMATION SHEET

XVII. Points to remember when setting goals and objectives (Assignment Sheet #4)

A. Farm business and family goals and objectives should be determined over time

B. Planning goals and objectives is not easy

C. Not all goals and objectives are related to farm income

D. There are no right or wrong goals and objectives

E. A systematic approach is helpful

F. Revision will be necessary as cooperators progress through stages of farm firm cycle

YEAR-END CLOSING OF RECORDS
UNIT XII

ASSIGNMENT SHEET #1 — COMPLETE A YEAR-END CLOSING OF RECORDS CHECKLIST

NAME ______________________________ SCORE ______________

Many errors can be avoided by using a systematic approach for the year-end closing of the record book.

Complete year-end closing of your record book by using the following checklist to help you avoid errors. Write the date completed in the "yes" box. Write an "X" in the appropriate "no" box if the item is not completed.

	YES	NO
Complete the year-end totals on cash-flow summary (Section 6, Form 6.2)		
Complete hired labor records for individual employees (Section 4, Form 4.7) (NOTE: Tax accountant will need hired labor records before January 31 to file FICA withholding taxes and employee W-2 forms.)		
Complete summary of family living records (Section 5)		
Complete ending inventory (Section 3)		
Complete year-end credit records (Section 4) 1. Ending loan balances		
2. Accrued interest		
3. Unpaid bills		
4. Open account balances		
5. Accounts receivable, ending balances, and accrued interest		
6. Ending savings account balance		
Complete supplemental records (Section S)		
Complete ending net worth statement (Section 6, Forms 6.3 and 6.4)		

ASSIGNMENT SHEET #1

	YES	NO
Complete spread sheet for net worth statement		
Complete income statement (Section 6, Form 6.5)		
Complete a comparative income statement analysis		
Complete whole farm business analysis (Section 6, Form 6.6)		
Complete measures of performance (Section 6, Form 6.7)		
Complete spread sheet for whole farm business analysis and measures of performance		
Complete evaluation of goals and objectives		
Complete forms for computerized whole farm and detailed enterprise analyses		
Date checklist completed ______________________________, 19_____		

YEAR-END CLOSING OF RECORDS
UNIT XII

ASSIGNMENT SHEET #2 — COMPLETE AN INCOME TAX CHECKLIST

NAME ______________________________ SCORE ____________

As is the case in most businesses, farming has certain tax problems peculiar to it. The tax problems arise from a variety of nontax business, regulatory, and weather considerations: government restrictions and subsidies, the weather, special inventory methods, sharecropping, Commodity Credit Corporation loans, and preparation and development of land before it becomes productive.

The Tax Code provides certain tax alternatives or tax-saving opportunities that remove some of the inequities that would otherwise exist.

The purpose of this assignment sheet is to provide a checklist of potential errors common to farmers and ranchers. Write the appropriate response for your farm situation in the space provided.

INCOME TAX CHECKLIST FOR FARMERS AND RANCHERS

	YES	NO	N/A	COMMENTS
Have you purchased a farm this taxable year? (NOTE: If yes, consider the importance of allocating costs to land, growing crops, dwelling.)				
Have you had any involuntary conversions this year? (NOTE: If yes, explore tax consequences of replacing with similar type property.)				
Have you sold easement or right-of-way this year?				
Have you accounted for all barter income for services rendered?				
Have you included all cash income received for goods and services?				
Have you accounted for all products used in the home?				

ASSIGNMENT SHEET #2

	YES	NO	N/A	COMMENTS
Are you sure that CCC loans have not been counted as income twice? (NOTE: Loans may have been counted in one year when borrowed and next year when crop is sold.)				
If you used the cash method, did you deduct the cost of purchased livestock that had strayed or died, or been lost or stolen this year?				
Did you deduct the *farm* share of all automobile, utility, telephone, and insurance expenses as actually used in farm business?				
Did you itemize on bank deposit slips all gifts and borrowings so that they will not be considered as taxable income?				
Did you keep a record of all medical, dental, and hospital bills, including premiums for accident and health insurance? (NOTE: Did you keep a record of medical mileage?)				
Did you keep an exact record of date of purchase, cost, and date of sale of all items purchased for resale?				
Did you keep an exact record of Social Security tax paid on wages of hired help? (NOTE: Did you file Form 943 and your employees' W-2 forms in a timely manner?)				
Do you keep all "paid" receipts, invoices, and cancelled checks for at least five years, including checks for payment of income tax?				

ASSIGNMENT SHEET #2

	YES	NO	N/A	COMMENTS
Do you keep receipts for purchases of items on which investment credit was taken for at least five years as evidence of purchase?				
Do you keep vouchers for improvement as long as property is held?				
Are you taking full advantage of capital gains?				
Are you making maximum use of investment credit and depreciation?				
Should you consider an IRA or Keogh plan?				
Should you consider income averaging?				
Should you consider the alternative method of paying Social Security tax?				
Do you have the information available to complete the appropriate 1099 forms?				
Do you have a record of rents and royalties received? (NOTE: If yes, obtain Form 6248, "Windfall Profits Tax.")				
If you had capital gains, investment credit, or claim accelerated ACRS on leased property, are you aware of the alternative minimum tax?				

YEAR-END CLOSING OF RECORDS
UNIT XII

ASSIGNMENT SHEET #3 — COMPLETE A BEGINNING-OF-THE-YEAR CHECKLIST

NAME ______________________________ SCORE ______________

To avoid many year-end closing problems, it is important for the cooperator to start each year with the correct balances and inventory in the new record book.

Use the following checklist to help you avoid these problems. Write the date completed in the "yes" box. Write an "X" in the appropriate "no" box if the item is not completed.

	YES	NO
Beginning inventory (Section 3) (NOTE: Transfer totals from previous year's ending inventory.)		
Beginning depreciation schedule (Section 3) (NOTE: Forward information from previous year's depreciation schedule.)		
Beginning credit records (Section 4) A. Beginning loan balances (NOTE: This includes forwarding ending loan balances, unpaid bills, open accounts, and accrued interest from previous year's ending balances.)		
B. Beginning accounts receivable balances (NOTE: Forward accounts receivable, accrued interest, and savings account balances from previous year's ending balances.)		
Beginning cash balance on cash flow summary form (Section 6, Form 6.1) (NOTE: Forward from ending cash balance on Form 6.2 from the previous year.)		
Beginning net worth statement (Section 6, Forms 6.3 and 6.4) (NOTE: Forward amounts from previous year's ending net worth statement.)		
If applicable, forward previous year's ending balance for family living to family living summary (Section 5)		
Date checklist completed ______________________, 19____		

YEAR-END CLOSING OF RECORDS
UNIT XII

ASSIGNMENT SHEET #4 — EVALUATE PERSONAL PERFORMANCE IN ATTAINING FARM BUSINESS AND FAMILY GOALS AND OBJECTIVES

NAME ______________________________ SCORE ______________

This assignment sheet is the yardstick for the entire program. Clear goals and well-defined objectives provide an outline for guiding the use of available resources, setting priorities, and measuring success. It is essential that adequate time and consideration be given to completing this assignment sheet.

Writing goals constitutes a two-step process. First, goals must be clarified. These are the material and personal aspirations the cooperator thinks are most important. Goals describe purposes for the farm business and family in nonquantifiable terms. Next, objectives are established to assist the cooperator in attaining the goals. These must be specific, measurable, realistically attainable, constructive, and represent an improvement over the present level of achievement. Simply stated, goals are broad and objectives are specific.

Goals and objectives may be family or farm business oriented. They also might apply to different time periods: *short term* is less than one year, *intermediate term* is one to seven years, and *long term* is over seven years.

Consider the following points in clarifying the cooperator's goals and establishing objectives:

- All family members should participate
- Recognize individual and family differences
- Recognize farm and family characteristics

EXAMPLES: Size of family; stage in family life cycle; size and type of farm business; social, cultural, and religious values; financial structure of farm business

- Recognize time periods
- Select goals in terms of available resources
- Competition between goals is normal
- Goals and objectives must be modified as resources and ideals change

FAMILY AND FARM BUSINESS GOALS

What do you as a family consider most important for your future welfare, happiness, and security? One of the steps for improving the farm business is to clarify what is wanted. Is it community involvement, a retirement plan, college education for the children, a comfortable home, or a partnership farming operation? You may know of things you have wanted as a family, but it takes considerable thought and discussion among family members to agree upon what is most important and which things come first.

Using the farm business and family goals and objectives developed and reviewed previously, and the forms on the following pages, evaluate your performance in achieving your objectives. Write an "X" in the appropriate boxes. Make additional comments if necessary.

ASSIGNMENT SHEET #4

(NOTE: Objectives should have been set in quantitative terms in order to measure progress toward their attainment.)
EXAMPLE:

GOAL	OBJECTIVE	Evaluation										COMMENTS
		Difficulty of the Objective					Achievement of the Objective					
		Extremely Difficult	Difficult	Some Difficulty	Easy	Extremely Easy	Exceeded	Achieved	Partially Met	Little Done	No Activity	
Family												
Develop family members' educations	Deposit $50 a month in educational savings account for son's college education		X					X				Depositied $600 during year. Difficult to deposit $50 each month.
Expand home	Build new home by 1987	X									X	Net Farm Income has been very low.
Farm Business												
Increase income	Increase net farm income by 10% each accounting period	X							X			Drought two years ago; low prices this year; may need to change to a more realistic objective.
	Achieve $150 returns above total operating costs for 1982 peanut crop		X				X					Achieved $176.30 returns above total operating costs
Increase number of acres farmed	Rent additional 160 crop acres in 1982			X				X				Rented 160 acres; cash rent, good wheat crop
	Purchase 160 acres by 1987	X								X		Contacted real estate broker

ASSIGNMENT SHEET #4

FAMILY AND FARM BUSINESS GOALS

	Evaluation										COMMENTS
	Difficulty of the Objective					Achievement of the Objective					
FAMILY	Extremely Difficult	Difficult	Some Difficulty	Easy	Extremely Easy	Exceeded	Achieved	Partially Met	Little Done	No Activity	
Short-term (less than one year)											
Intermediate term (one to seven years)											
Long-term (over seven years)											
FARM BUSINESS											
Short-term (less than one year)											
Intermediate term (one to seven years)											
Long-term (over seven years)											

ASSIGNMENT SHEET #4

FARM BUSINESS

GOAL	OBJECTIVE	Evaluation										COMMENTS
		Difficulty of the Objective					Achievement of the Objective					
		Extremely Difficult	Difficult	Some Difficulty	Easy	Extremely Easy	Exceeded	Achieved	Partially Met	Little Done	No Activity	

ASSIGNMENT SHEET #4

FAMILY

GOAL	OBJECTIVE	Evaluation										COMMENTS
		Difficulty of the Objective					Achievement of the Objective					
		Extremely Difficult	Difficult	Some Difficulty	Easy	Extremely Easy	Exceeded	Achieved	Partially Met	Little Done	No Activity	

YEAR-END CLOSING OF RECORDS
UNIT XII

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1 — Evaluated to the satisfaction of the instructor

Assignment Sheet #2 — Evaluated to the satisfaction of the instructor

Assignment Sheet #3 — Evaluated to the satisfaction of the instructor

Assignment Sheet #4 — Evaluated to the satisfaction of the instructor

YEAR-END CLOSING OF RECORDS
UNIT XII

TEST

NAME ____ SCORE ________________

1. Match to their correct definitions terms associated with year-end closing of records. Write the correct numbers in the blanks.

_____a. Financial statement that lists assets and liabilities of a farm business at a particular time, usually at end of accounting year

_____b. Financial statement that lists cash and noncash receipts and expenses of a farm business during a specified period of time, usually a year

_____c. Financial statement that shows cash received and cash spent during an accounting period

_____d. Form used for comparative analysis of net worth statements from several years

_____e. Form used for comparative analysis of income statements from several years

_____f. Tool of financial analysis estimating flow of cash through farm business

_____g. Management tool used to identify factors affecting profitability and efficiency of farm business

_____h. Management tool used to identify factors affecting profitability and efficiency of various enterprises

_____i. Purposes for farm business and family in nonquantifiable terms

_____j. Specific, measurable, realistically attainable, constructive aims that represent an improvement over present level of achievement

_____k. Year-round process whereby cooperators constantly make decisions that can have a large impact on the amount of taxes that will have to be paid at year's end

_____l. Relationship in quantity, amount, or size between two or more things

1. Ratio
2. Net worth spread sheet
3. Objectives
4. Net worth statement
5. Comparative income statement analysis sheet
6. Cash-flow summary
7. Detailed enterprise analysis
8. Tax management
9. Income statement
10. Cash-flow projection
11. Whole farm analysis
12. Goals

TEST

2. Select from the following list reasons for keeping accurate, up-to-date records. Write an "X" in the blank before each correct answer.

_____a. To verify legal and business transactions

_____b. To avoid last-minute, end-of-year rush to make sure everything is accounted for

_____c. To indicate liquidity or solvency

_____d. To provide accurate, up-to-date analysis of business performance

_____e. To measure profitability of farm business over a specified period of time

_____f. To reduce chance that incorrect information could be used in reporting tax information

_____g. To indicate strengths and weaknesses in farm business

3. State three ways of finding and correcting errors in records.

a. ____

____

b. ____

____

c. ____

____

4. Arrange in order steps in year-end closing of records. Write a "1" before the first step, a "2" before the second step, and so on.

_____a. Complete net worth statement and spread sheet

_____b. Complete summary of family living records

_____c. Complete cash-flow summary

_____d. Complete income statement and comparative income statement analysis sheet

_____e. Analyze performance of farm business

_____f. Complete hired labor records

TEST

______g. Complete depreciation schedule

______h. Complete ending inventory

______i. Complete whole farm analysis and measures of performance

______j. Complete year-end credit records

______k. Complete supplemental records

______l. Complete detailed enterprise analysis

5. State five purposes of a cash-flow summary.

a. ____

____

b. ____

____

c. ____

____

d. ____

____

e. ____

____

6. Select from the following list purposes of income tax management and planning. Write an "X" in the blank before each correct answer.

______a. Indicating strengths and weaknesses of farm business

______b. Maximizing after-tax income

______c. Holding to a minimum tax liabilities resulting from transactions

______d. Controlling tax if time and method of carrying out transactions are determined by cooperator

______e. Indicating liquidity and solvency of farm business

______f. Establishing proof of proper accounting and bookkeeping procedures for an IRS audit

TEST

7. Select from the following list guidelines for taking inventory. Write an "X" in the blank before each correct answer.

_____a. Count and value all assets and liabilities of the farm business at one specific date

_____b. Take at the same time each year

_____c. Count only assets of the farm business

8. State the purposes of supplemental records.

a. ______________________________

____

b. ______________________________

____

c. ______________________________

____

9. List seven types of supplemental records.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

f. ______________________________

g. ______________________________

10. State four purposes of a net worth statement.

a. ______________________________

____

b. ______________________________

____

TEST

c. ____

____

d. ____

____

11. Match to their correct definitions terms associated with a net worth statement. Write the correct numbers in the blanks.

______a. Value of assets not claimed by individuals or firms outside farm business or owner's claim on those assets

______b. Firm's capacity to generate sufficient cash to meet its financial obligations as they fall due

______c. Firm's ability to meet long-run claims against the business

______d. Items or resources controlled by farm business

______e. Financial claims against farm business

______f. Indicator of farm's ability to meet its short-run payment obligations

______g. Measure of farm's solvency over an intermediate time span of one to ten years

______h. Indicator of long-run solvency of farm business

______i. Measure of firm's total financial obligations to creditors in relation to capital provided by cooperators

______j. Measure of risk-bearing ability of farm

1. Solvency
2. Net capital ratio
3. Debt-to-equity ratio
4. Net worth
5. Current ratio
6. Liquidity
7. Percent equity ratio
8. Liabilities
9. Working asset ratio
10. Assets

12. Select from the following list the purposes of an income statement. Write an "X" in the blank before each correct answer.

______a. Measuring profitability of farm business over specific period

______b. Making profit and loss sources easier to identify

______c. Indicating liquidity and solvency of the farm business

______d. Showing disposition of net farm income

TEST

13. Match to their correct definitions terms associated with an income statement. Write the correct numbers in the blanks.

_____a. Cash income flowing into farm business

_____b. Cash flowing out of farm business

_____c. Labor contributed by operator and farm family to operation of farm business

_____d. Monetary value available for family living, income taxes, debt retirement, increased equity in business, nonfarm investment, or other savings

1. Receipts
2. Net farm income
3. Unpaid labor
4. Expenditures

14. Select from the following list the purposes of a whole farm analysis. Write an "X" in the blank before each correct answer.

_____a. Checking accuracy of monthly cash balances

_____b. Providing insights into farm business

_____c. Measuring present financial position

_____d. Identifying factors affecting profitability and efficiency of farm business

_____e. Helping cooperator make better management decisions when farm records are kept over several years

_____f. Allowing cooperator to compare entire farm business with various comparison standards

15. State four purposes of a detailed enterprise analysis.

a. ____

____

b. ____

____

c. ____

____

d. ____

____

TEST

16. Arrange in order the steps in transferring to a new record book. Write a "1" before the first step, a "2" before the second step, and so on.

______a. Record beginning cash balance

______b. Record beginning inventory

______c. Record beginning credit records

______d. Record beginning net worth statement

______e. Record beginning depreciation schedule

17. State four points to remember when setting goals and objectives.

a. ____

____

b. ____

____

c. ____

____

d. ____

____

(NOTE: Test questions 18-21 list the assignment sheets. They are an important part of this test. If they have not been completed, check with your instructor.)

18. Complete a year-end closing of records checklist.

19. Complete an income tax checklist.

20. Complete a beginning-of-the-year checklist.

21. Evaluate personal performance in attaining farm business and family goals and objectives.

YEAR-END CLOSING OF RECORDS
UNIT XII

ANSWERS TO TEST

1.

a.	4	d.	2	g.	11	j.	3
b.	9	e.	5	h.	7	k.	8
c.	6	f.	10	i.	12	l.	1

2. a, b, d, f, g

3. Answer should include any three of the following

   a. Check all mathematical calculations

   b. Determine the most likely places for errors to occur

   c. Check to see that transferrals of original figures match those on the actual records

   d. Correct any inaccuracies or discrepancies found

4.

a.	8	d.	9	g.	4	j.	6
b.	3	e.	12	h.	5	k.	7
c.	1	f.	2	i.	10	l.	11

5. Answer should include any five of the following

   a. Showing record of actual monthly cash transactions for previous year

   b. Checking accuracy of monthly cash balances

   c. Providing historical record of cash-flow transactions

   d. Determining timing of cash transactions when completing cash-flow projection

   e. Providing farm cash income and expense totals for income tax forms

   f. Comparing with cash-flow projection

   g. Supporting a loan decision

ANSWERS TO TEST

6. b, c, d, f

7. a, b

8. a. Recording materials and resources used by various enterprises or different production practices

   b. Showing yield, production, or physical performance of enterprises

   c. Adding to financial records

9. Answer should include any seven of the following

   a. Home products

   b. Breeding records

   c. Mortality records

   d. Livestock feeding records

   e. Crop and feed balance

   f. Livestock production summary

   g. Crop records

   h. Crop production summary

   i. Monthly labor summary

10. Answer should include any four of the following

    a. Measuring present financial position

    b. Recording growth in farm business through changes in net worth

    c. Providing an indication of amount of debt supported by various classes of assets

    d. Providing early warning through ratio analysis of problems that may arise in short-run, intermediate, and long-run periods

    e. Indicating liquidity and solvency

ANSWERS TO TEST

11. a 4
    b. 6
    c. 1
    d. 10
    e. 8
    f. 5
    g. 9
    h. 2
    i. 3
    j. 7

12. a, b, d

13. a. 1
    b. 4
    c. 3
    d. 2

14. b, d, e, f

15. Answer should include any four of the following
    a. Estimating level of profitability
    b. Identifying factors affecting profitability
    c. Determining relative efficiency and profitability of enterprises
    d. Indicating enterprises that could be increased or decreased to increase profits
    e. Helping cooperator make management decisions when enterprise records are kept over a number of years
    f. Analyzing specific enterprises

16. a. 4
    b. 1
    c. 3
    d. 5
    e. 2

ANSWERS TO TEST

17. Answer should include any four of the following

    a. Farm business and family goals and objectives should be determined over time

    b. Planning goals and objectives is not easy

    c. Not all goals and objectives are related to farm income

    d. There are no right or wrong goals and objectives

    e. A systematic approach is helpful

    f. Revision will be necessary as cooperators progress through stages of farm firm cycle

18. Evaluated to the satisfaction of the instructor

19. Evaluated to the satisfaction of the instructor

20. Evaluated to the satisfaction of the instructor

21. Evaluated to the satisfaction of the instructor